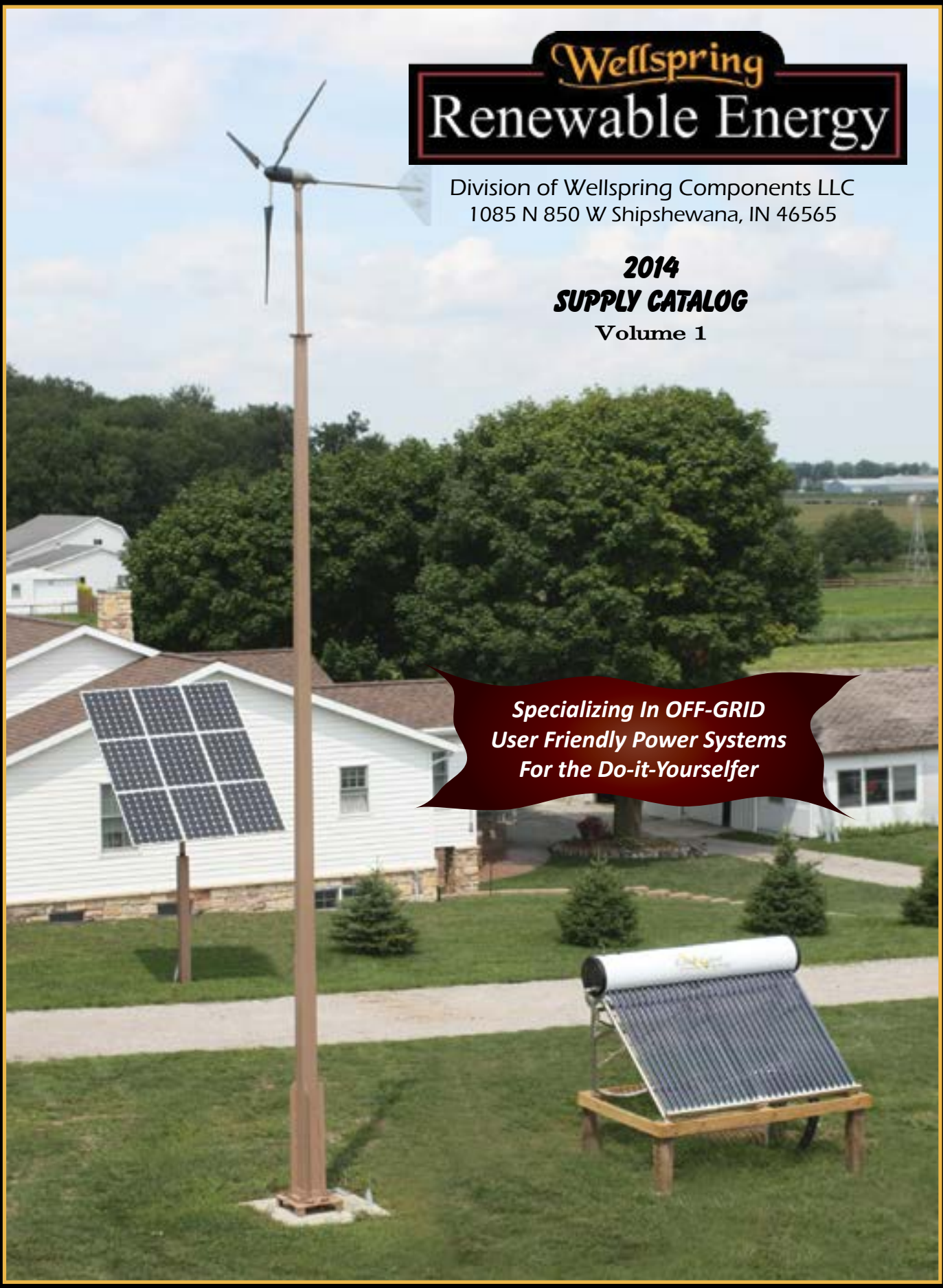

Wellspring
Renewable Energy
Division of Wellspring Components LLC
1085 N 850 W Shipshewana, IN 46565
2014
SUPPLY CATALOG
Volume 1
Specializing In OFF-GRID
User Friendly Power Systems
For the Do-it-Yourselfer

Wellspring Renewable Energy

Diagrams & Information • Solar Panels • Charge Controllers
Batteries • Solar Mounting • DC Volt Appliances • LED Lighting
Inverters/Chargers • Accessories

HOURS
Mon.-Fri. 8:00-5:00
Sat. 8:00-2:30

To Place an Order:
You may either send in a written purchase order to, Wellspring R.E. Power, 1085N 850W Shipshewana, IN 46565, or phone in your order, (260)768-7336. When placing an order, please use product number plus description, size color, etc.

Terms for Wholesale:
All orders prepaid or sent C.O.D. without an established account.

To Open an Account:
Please send us at least 3 credit references, plus bank name and address.
For dealer pricing, send along retail sales tax number.

Open Accounts:
Less 2% if paid on delivery, net 15 days. After 30 days the account is subject to a 1½% per month charge.
No discount on shipping, C.O.D. or if you have a past due balance.

Product Returns:
If you have damaged or missing items please DO NOT SEND BACK. Save original package with all contents and contact us. This needs to be done within 15 days. Non defective items can be returned for credit minus a 10% restocking charge. Items have to be in original package and we have to be able to sell it as new or we cannot accept it.

Prices and specifications subject to change without notice. FOB Wellspring R.E. Power, a handling charge of $.50 per package will be added on all UPS and USPS shipments.

Renewable Energy Sense

At Wellspring Components, LLC you'll find a large variety of products that are designed and geared toward off-grid independence and to deal directly with our energy issues . Solar panels, wind turbines, inverters, charge controllers, battery packs, DC lighting, LP & Nat. gas lighting, off-grid security lights, DC water pumps, LED flashlights, 12V fans, 12/24V deep freeze, and etc. all located in one convenient place. A lot of people might be trying to ignore the energy issue but still most of them will recognize that the whole world has to consider energy an issue to be dealt with regardless if we're trying to ignore it or not.

As of now you'll probably find that grid power in the Mid West is still cheaper than renewable energy. Can we really justify comparing cost if we considering the fact that we're not consuming the energy of tomorrow by using solar or wind powered energy? You're part of the solution and not part of the problem when you conserve energy and adapt the use of renewable energy. Sometime it might not seem to make sense financially at the moment but, what about the future and also, how can you put a price on a satisfied feeling.

What kind of return can I expect from my investment in solar or wind energy? This question is on the tip of about every person's tongue that is inquiring about renewable energy. Most people would consider a 15 to 20 year return a bad investment. This would actually be a good return compared to most of the money we spend. What kind of return for your money do you get when you drive a new car out of the dealers lot, the clothes you buy today that you'll sell on next years garage sale for $.50, the grill you took home from that save-a-bunch store, that big new TV, pampers, the trip to the steak house, vacation by the lake, the latest book and on and on. Think about it. Are not most of these purchases based on our wants and what we value and enjoy in life?

It does seem somewhat strange that we'd consider buying good, clean energy no different than any real estate investment. Many people are beginning to realize the true value of RE rather than focusing on the up front cost or financial payoff. A well designed solar system will give a return of dependable energy and fixed costs for years and years. There is just no way to put a true value on your investment when you're being part of the solution.

Recognizing the limits of solar and wind is just as important as any other power generating source and then sizing the system accordingly. Taking a deep look at the real facts is all the difference between satisfaction and frustration.

Power outages is not anything pleasant to deal with and Wellspring Components can design for your application a back up system with a modified or true sine wave MAGNUM inverter with battery bank to keep your water pump, freezer, lights and etc. running in time of a power crisis. MAGNUM Energy is the first company to produce a single unit that produces 120V AC and 240V AC on the output side. Wellspring feels privileged to be the Midwest renewable energy distributor for MAGNUM Energy product line.

Many of these products have been widely used in the agriculture and cottage industry such as the dairy and poultry farms, woodworking, metal shops and etc.. Quite a few people run their farms and shops completely off-grid and have combined the use of diesel or gas powered motors with renewable energy. Combustion motors are run when the most power is needed such as in morning and evening milkings. The couple hours this runs it'll recharge a battery bank sized to the application and than during the day and night this power bank will power water pumps, heat circulating pumps and other vital equipment. This will substantially lower the amount of emissions and fuels associated with motors and grid power.

Gas lighting is widely used and can be warm in the summer but in the winter when you need the most light it is 100% efficient because you benefit from the heat and light with the same amount of fuel.

ENERGYWISE is the renewable energy trade name for Wellspring Components and used mostly with their own line of batteries. Available and most of them on the shelf are forklift type deep cycle batteries, batteries for excavation equipment, trucks, auto, motorcycle, marine, scrubber, all the way to small flashlight and watch batteries.

Wellspring Components is now a 4th. generation family business that started out in the family, on the same street in the mid 50's as a general blacksmith shop. The company is still dedicated in being a service to the community.

Owner / Product Engineer
Norman Yoder

R. E. Consultant
Arlin Yoder

The OFF-GRID Remote Home

Your own independent Power System can provide most electric conveniences for an off-grid home, or in remote locations where bringing in utility lines would be impossible or prohibitively expensive. Just extending utility power 1/4 mile or more to reach a home site can cost $15,000 or more, and thats before you have get power. Equipment to produce your own solar electric power may cost less.

Natural & Free Energy already on your site in sunlight, wind, or falling water can be converted into electricity. We specialize in power entirely from solar, wind, or micro hydro, plus generator back-up.

We use it. Most of our owners and employees live in homes that are comepletely or partially powered by renewable resources.

The amount of power your system can generate depends on the amount of natural energy resources your site has available and how much equipment you install to gather the energy. How much benefit you get out of your energy depends on what type of lighting and appliances you have. You want appliances and lighting to be as efficient as possible, so that means using special lighting, refridgerators, freezer that consume a fraction of the power normal appliances use. Also use natural or propane gas for all your major heat production like as in cooking, water heating, clothes drying, and home heating. (Try to include some wood heat if possible.) Put in extra switches to cut off phantom loads (loads that draw power even when turned off). Things like stereo, TV, garage door opener, and office equipment. We often use DC lighting, DC motion sensor lights, and other DC appliances that can be wired directly to the house battery bank to use no power when turned off. It is good to use heating systems that can heat your home without using pumps or blowers to distribute the heat throughout your home.

Learn how to get the most out of little power by:

1. Design the whole house (water, heat, power) for low energy use.
2. Carefully select low energy lights & appliances
3. Eliminate energy wastes in appliances and from human carelessness.

After doing these three things you can get an affordable and efficient solar electric wind or micro hydro system that can provide electricity for a comfortable independent home.

Efficency In An OFF-GRID Home

Most household appliances and lights use only a little electricity that can easily be supplied by renewable resources. Most off-grid homes convert most of their power to 120 volt AC to use as needed for household appliances and lights. Most common used are: lights, water pump, TV, computer & office equipment. Even high wattage appliances like microwave oven, toaster, hair dryer can be used because their actual running time is short. AC water pumps up to 1/2 horsepower are used. Electric refridgerators and freezers are selected carefully to save energy. Also gas and DC refrigerates and freezers are used.

What To Avoid In An OFF-GRID Home

Major electric heating or cooling appliances, electric heat, electric hot water, electric cookstove, electric heated clothes dryer and air conditioner account for 80% of a typical monthly electric bill. It is absolutely not practical to run these appliances on 120 vac in a solar powered home. There are other options to produce heat at a much lower cost. Use wood or propane fueled furnaces, gas cook stoves and water heaters. Use a gas clothes dryer or hang your clothes out in the sun (natural clothes dryer).

Avoid large freezers and refridgerators. Most refrigerates have poor insulation and have a lot longer run time per day then if you use a refridgerator or freezer designed for efficiency and OFF-GRID homes. There are differnt types available like gas powered or battery direct.

Having An Efficient Power System

Once you have gone through your home and become as efficient as you can in your applinces, you are ready for a power system. You have to evaluate your site and decide which type of equipment you want to install to produce your power, such as wind, solar, or microhydro. You can also do a hybrid system which can include different types of equipment in one system. Because life styles and power usage vary so widely between individuals, a rural OFF-GRID solar electric system can cost anywhere between $2,500.00 to $55,000.00. Most of our customers spend between $6,500.00 and $18,000.00. Costs vary with the amount of power needed and average daily sunshine hours for your area.

Equipment Location

Batteries, inverters, and electronic controls should be installed in a utility room inside or near the residence. Batteries take 2-20 sq. ft. of floor space. Allow ample working room to check batteries and avoid cramping anything in a tiny closet. Electronic components should be kept in a clean, moisture free enviroment.

Batteries should not be accesible to children or other people who are unfamiliar with their hazards. Flooded batteries emit amounts of flammable (non-poisonous) hydrogen and oxygen gas when charging, so therefore they should be kept in an enclosed box which is vented to the outside. They should stay above freezing & also avoid temperatures of 100° F.

Here at Wellspring R.E.Power we sell, teach, install, and service our products. We also offer prewired systems and after sales support for do-it-yourself type of people.

Wellspring R.E.Power

1085 N 850 W
Shipshewana, IN 46565

Store Hours:
Mon-Fri 8:00 - 5:00
Sat. 8:00 - 2:30

Ph# 260.768.7336
Fax# 260.768.7215
wellspringrepower@gmail.com

OFF-GRID LOADS WORKSHEET

Use this worksheet to determine the total energy in amp-hours per day used by all the AC and DC loads in your system.

Calculate your AC loads

If no AC loads, skip to step 5.

1. List all AC loads, wattage and hours of use per week in the spaces provided. Multiply watts by hours/week to get watt-hours per week (WH/Wk.) Add up all the watt hours per week to determine AC watt-hours per week.
NOTE: Wattage of appliances can usually be determined from spec tags or from the owners manual. If it is rated in amps, multiply amps by operating voltage (120 or 240) to find watts.

Description of AC loads run by inverter	Watts	X	Hours/Week	=	Watt Hrs/Wk
	Total Watt Hours / Week				

2. Convert to DC watt-hours per week. Multiply line 1 by 1.15 to correct for inverter loss. _____

3. Inverter DC input voltage; usually 12, 24 or 48 volts. This is DC system voltage. _____

4. Divide line 2 by line 3. This is total DC amp-hours per week used by AC loads. _____

Calculate your DC loads

5. List all DC loads in the space provided below. If you have no DC loads, enter "0" in line 7 and proceed to line 8.

Description of DC loads	Watts	X	Hours/Week	=	Watt Hr/Wk
	Total Watt Hours / Week				

6. DC system voltage. Usually 12, 24, or 48 volts. _____

7. Find total amp-hours per week used by DC loads. Divide line 5 by line 6. _____

8. Total amp-hours per week used by AC loads from line 4. _____

9. Add lines 7 and 8. This total amp-hours per week used by all loads. _____

10. Divide line 9 by 7 days. This is total average amp-hours per day that needs to be supplied by _____ the battery. Enter this number on line 1 on the PV Array Design Worksheet and on line 1 of, Battery Sizing Worksheet.

OFF-GRID PV ARRAY DESIGN WORKSHEET

Use this worksheet to calculate the number of solar modules required for your system.

To find average sun-hours per day in your area (line 3), check local weather data. Use the maps below to get a fairly good idea of sun-hours per day for your area. If you want year-round autonomy, use the lowest figure. If you want 100% autonomy only in summer, use the higher figure. If you have a utility system with net metering, use the yearly average figure. The *peak amperage of the module you will be using can be found in the module specifications. You can also get close enough if you divide the module's rated wattage by the peak power point voltage, usually 17 to 17.5 for a 12 volt module or 34 to 35 volts for a 24 volt module.

Step 1. Total average amp-hours per day needed from System Loads Worksheet, Line 10: _____

Step 2. Multiply line 1 by 1.2 to compensate for loss from battery charge / discharge: _____

Step 3. Average sun-hours per day in your area: _____

Step 4. Divide line 2 by line 3. This is the total solar array amps required: _____

Step 5. Optimum or *peak amps of solar module used. See module specifications. _____

Step 6. Total number of solar modules in parallel required. Divide line 4 by 5: _____

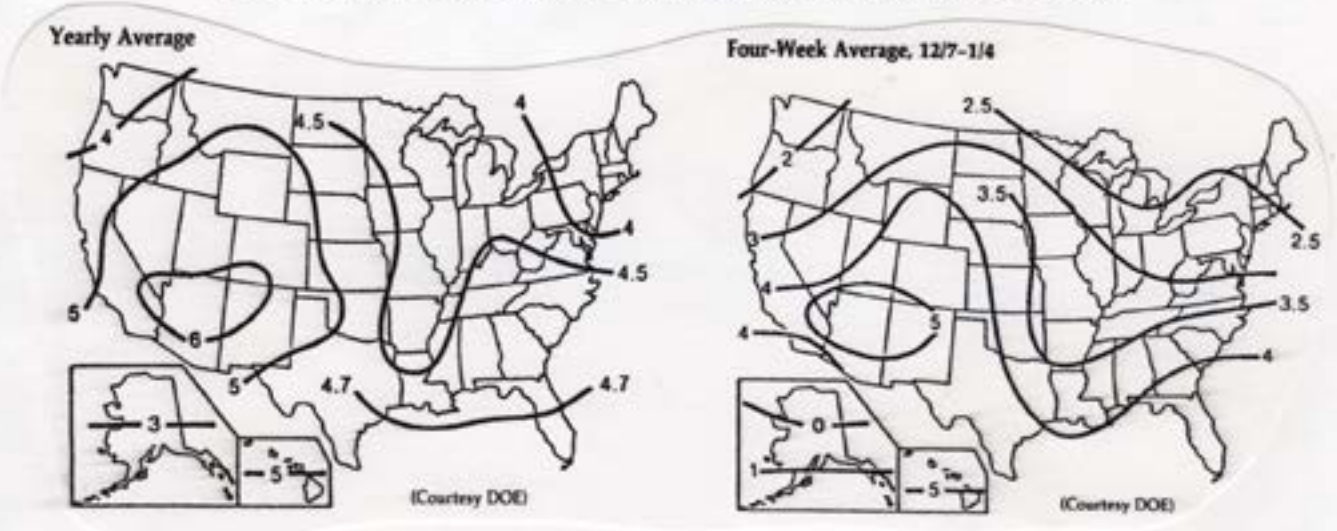
Step 7. Round off to the next highest whole number: _____

Step 8. Number of modules in each series string to provide DC battery voltage-see chart below: _____

Step 9. Total number of solar modules required. Multiply line 7 by line 8. _____

Nominal System Voltage	Number of Series Connected Modules Per String	
Volts	12V Module	24V Module
12	1	N/A
24	2	1
48	4	2

The Charts below show Sun-Hours per Day for the U.S.



BATTERY BANK INFORMATION

Battery Sizing Worksheet

Use this worksheet to determine what size battery is required for your system. Battery size is measured in amp-hours. This is a measure of battery capacity. Battery voltage is determined by the number of "cells" in series. All Lead-acid battery cells have a nominal output of 2 volts. Actual cell voltage varies from about 1.7 volts at full discharge to 2.4 volts at full charge. 12 volt lead-acid batteries are made of 6 separate cells in a case. 6 volt batteries are made of 3 cells in one case. **Putting battery cells in parallel increases amp-hour capacity, but does not change voltage. Putting in series increases voltage.**

Battery Temperature	Multiplier
80°F /26.7°C	1
70°F / 21.2°C	1.04
60°F / 15.6°C	1.11
50°F / 10.0°C	1.19
40°F / 4.4°C	1.3
30°F / -1.1°C	1.4
20°F / -6.7°C	1.59

Step 1. Total average amp-hour per day required from the Systems Load Worksheet, line 10: _____

Step 2. Maximum number of continuos cloudy days expected in your area; _____

Step 3. Multiply line 1 by line 2: _____

Step 4. Divide line 3 by 0.8 to maintain a 20% reserve after deep discharge period.
(Dividing line 3 by a more conservative 0.5 will maintain a 50% reserve and increase battery life): _____

If no special conditions below apply, skip to line 9.

Special condition #1: Heavy Electrical Load

Step 5. Maximum amperage that will be drawn by the loads for 10 minutes or more: _____

Step 6. Multiply line 5 by line 5.0 _____

Special Condition #2: High Charge Current

Step 7. Maximum output amperage of PV array or other battery charger: _____

Step 8. Multiply line 7 by 10.0 hours: _____

Step 9. Amp hours from line 4, 6 or 8, whichever is largest: _____

Step 10. If you are using a lead acid battery, select the multiplier from the Battery Temperature Chart above which corresponds to the battery's wintertime average ambient temperature: _____

Step 11. Multiply line 9 by line 10. This is your optimum battery size in amp-hours: _____

Step 12. Amp-hours of battery chosen. (T105=220 * L16=350, etc.): _____

Step 13. Divide line 11 by line 12. This is the total number of batteries in parallel required: _____

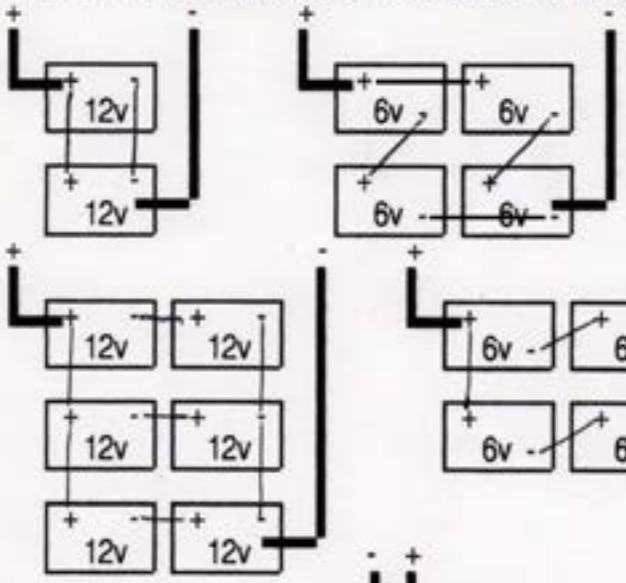
Step 14. Round off to the next highest whole number. This is the number of parallel strings required: _____

Step 15. To determine the number of batteries required in series, divide the system voltage (12, 24, 48) by the voltage of the chosen battery (2V, 6V or 12V): _____

Step 16. Multiply line 14 by line 15. This is the total number of the chosen battery needed for the system: _____

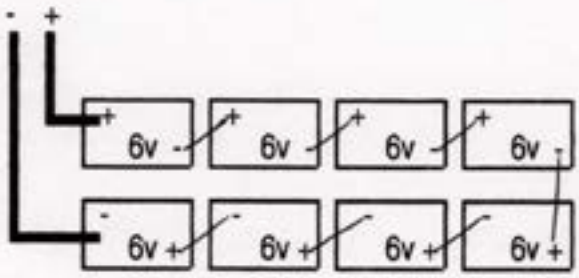
BATTERY WIRING DIAGRAMS

Batteries can deliver extremely high current. Always install fuse protection on any positive wiring connected to batteries.



(2 examples of)
12 VOLT BATTERY WIRING DIAGRAM

(2 examples of)
24 VOLT BATTERY WIRING DIAGRAM



(1 example of)
48 VOLT BATTERY WIRING DIAGRAM

Battery Condition @ 77°	Nominal Battery Voltage		
	12V	24V	48V
Battery during equalization charge	Over 15	Over 30	Over 60
Battery near full charge while charging	14.4 to 15.0	28.8 to 30.0	57.6 to 60.0
Battery near full discharge while charging	12.3 to 13.2	24.6 to 26.4	49.2 to 52.8
Battery fully charged with light load	12.4 to 12.7	24.8 to 25.4	49.6 to 50.8
Battery fully charged with heavy load	11.5 to 12.5	23.0 to 24.0	46.0 to 50
No charge or discharge for 6 hours - 100% charged	12.7	25.4	50.8
No charge or discharge for 6 hours - 80% charged	12.5	25	50
No charge or discharge for 6 hours - 60% charged	12.2	25.4	48.8
No charge or discharge for 6 hours - 40% charged	11.9	23.8	47.6
No charge or discharge for 6 hours - 20% charged	11.6	23.2	46.4
No charge or discharge for 6 hours - Fully discharged	11.4	22.8	45.6
Battery near full discharge while discharging	10.2 to 11.2	20.4 to 22.4	40.8 to 44.8

% of Charge versus Hydrometer Reading	100% * 1.265	75% * 1.239	50% * 1.2	25% * 1.17	Fully Discharged * 1.11

Wiring Reference Guide

Proper wire selection is critical for safety and good system performance. The wire needs to be sized not only handle the maximum current flow include any required safety factors, but should also be sized to limit the voltage drop between various components in the system. Typically, renewable energy systems are design to limit the voltage drop to about 2%. 12-volt DC systems are especially sensitive to voltage drop. The wire's insulation (wire rating) also needs to be rated for the environmental conditions in which it will be installed. If unsure of the required wire rating, consult the NEC or a licensed electrician.

The sizing guide below provides the minimum wire size needed to limit the voltage drop to 2% for a given one-way distance in 12V, 24V, 48V or 120V systems. The blank areas of the tables indicate wire sizes that are not appropriate for the amperage.

How the tables work:

1. On the left, locate the current you will be dealing with (either array or load current).
2. Move across to locate the desired one-way distance to be traveled.
3. Move up to locate the size of the wire to be used.

Maximum one-way distance (in feet) for a 2% voltage drop in copper wire.
Wire sizes shown in AWG.
System voltages are the nominal system voltages.

12-Volt System - 2% Voltage Drop

AMPS	#14	#12	#10	#8	#6	#4	#2	1/0	2/0	4/0
1	45	70	115	180	290	456	720	•	•	•
2	22.5	35	57.5	90	145	228	360	580	720	1060
4	10	17.5	27.5	45	72.5	114	180	290	360	580
6	7.5	12	17.5	30	47.5	75	120	193	243	380
8	5.5	8.5	15	22.5	35.5	57	90	145	180	290
10	4.5	7	12	18	28.5	45.5	72.5	115	145	230
15	3	4.5	7	12	19	30	48	76.5	96	150
20	2	3.5	5.5	9	14.5	22.5	36	57.5	72.5	116
25	1.8	2.8	4.5	7	11.5	18	29	46	58	92
30	1.5	2.4	3.5	6	9.5	15	24	38.5	48.5	77
40	•	•	2.8	4.5	7	11.5	18	29	36	56
50	•	•	2.3	3.6	5.5	9	14.5	23	29	46
100	•	•	•	•	2.9	4.6	7.2	11.5	14.5	23
150	•	•	•	•	•	•	4.8	7.7	9.7	15
200	•	•	•	•	•	•	3.6	5.8	7.3	11

24 -Volt System - 2% Voltage Drop

AMPS	#14	#12	#10	#8	#6	#4	#2	1/0	2/0	4/0
1	90	140	230	360	580	912	1440	•	•	•
2	45	70	115	180	290	456	720	1160	1440	2120
4	20	35	55	90	145	228	360	580	720	1160
6	15	24	35	60	95	150	240	386	486	760
8	11	17	30	45	71	114	180	290	360	580
10	9	14	24	36	57	91	145	230	290	460
15	6	9	14	24	38	60	96	153	192	300
20	4	7	11	18	29	45	72	115	145	232
25	3.6	5.6	9	14	23	36	58	92	116	184
30	3	4.8	7	12	19	30	48	77	97	154
40	•	•	5.6	9	14	23	36	58	72	112
50	•	•	4.6	7.2	11	18	29	46	58	92
100	•	•	•	•	5.8	9.2	14.4	23	29	46
150	•	•	•	•	•	•	9.6	15.4	19.4	30
200	•	•	•	•	•	•	7.2	11.6	14.6	22

48-Volt System - 2% Voltage Drop

AMPS	#14	#12	#10	#8	#6	#4	#2	1/0	2/0	4/0
1	180	280	460	720	1160	1824	2880	•	•	•
2	90	140	230	360	580	912	1440	2320	2880	4240
4	40	70	110	180	290	456	720	1160	1440	2320
6	30	48	70	120	190	300	480	772	972	1520
8	22	34	60	90	142	228	360	580	720	1160
10	18	28	48	72	114	182	290	460	580	920
15	12	18	28	48	76	120	192	306	384	600
20	8	14	22	36	58	90	144	230	290	464
25	7.2	11.2	18	28	46	72	116	184	232	368
30	6	9.6	14	24	38	60	96	154	194	308
40	•	•	11.2	18	28	46	72	116	144	224
50	•	•	9.2	14.4	22	36	58	92	116	184
100	•	•	•	•	11.6	18.4	28.8	46	58	92
150	•	•	•	•	•	•	19.2	30.8	38.8	60
200	•	•	•	•	•	•	14.4	23.2	29.2	44

120-Volt System - 2% Voltage Drop

AMPS	#14	#12	#10	#8	#6	#4	#2	1/0	2/0	4/0
1	450	700	1150	1800	2900	4560	7200	•	•	•
2	225	350	575	900	1450	2280	3600	5800	7200	10600
4	100	175	275	450	725	1140	1800	2900	3600	5800
6	75	120	175	300	475	750	1200	1930	2430	3800
8	55	85	150	225	355	570	900	1450	1800	2900
10	45	70	120	180	285	455	725	1150	1450	2300
15	30	45	70	120	190	300	480	765	960	1500
20	20	35	55	90	145	225	360	575	725	1160
25	18	28	45	70	115	180	290	460	580	920
30	15	24	35	60	95	150	240	385	485	770
40	•	•	28	45	70	115	180	290	360	560
50	•	•	23	36	55	90	145	230	290	460
100	•	•	•	18	29	46	72	115	145	230
150	•	•	•	•	•	•	48	77	97	150
200	•	•	•	•	•	•	36	58	73	110

Wellspring Renewable Energy

SOLAR MODULES

Model Number	5wp	10wp	50wp	100wp	125wp	230wp
Maximum Power (W)	5	10	50	100	125	230
Rated Voltage (Vmp)	17	17.3	17.0	17.2	18.9	29.8
Rated Current (Imp)	.30	.58	2.94	5.8	6.34	7.71
Open Circuit Voltage (Voc)	21	21.3	20.8	21.6	23.8	37.1
Short Circuit Current (Isc)	.33	.66	3.15	6.46	7.10	8.21
At standard test condition	1000 W/m²					
Warranty	90% of 10 years, 80% 0f 25 years					
Allowable hail load	23 m/s, 7.53g					

SOLARWORLD

Model Number	SW250Poly		
Maximum Power (W)	250		
Rated Voltage (Vmp)	30.5		
Rated Current (Imp)	8.27		
Open Circuit Voltage (Voc)	20.8		
Short Circuit Current (Isc)	3.15		
PRICE	$298.00		
At standard test condition	1000 W/m²		
Warranty	90% of 10 years, 80% 0f 25 years		
Allowable hail load	23 m/s, 7.53g		

Wellspring Renewable Energy

MAGE SOLAR MODULES

Model Number	175WP	180WP	220WP
Maximum Power (W)	175	180	220
Rated Voltage (VMP)	35.87	36.02	29.4
Rated Current (Imp)	4.88	5.00	7.63
Open Circuit Voltage (Voc)	44.40	44.80	36.40
Short Circuit Current (Isc)	5.21	5.30	8.27
Solar Cell Type	Mono crystalline	Mono crystalline	Poly crystalline
Length (in)	62.20	62.20	64.41
Width (in)	31.81	31.81	39.05
Depth (in)	1.38	1.38	1.38
Warranty	30 yr.	30 yr.	30 yr.
Max. System Voltage	600 volts	600 volts	600 volts

SYSTEM SPOTLIGHT

Location: Indiana
Application: OFF-Grid Home
System: 1.6 KW System with 9 Mage 185 watt panels.
Installed by Wellspring RE Power

DURA SERIES

Unbreakable

The Dura-Series line of solar panels are designed to fulfill the ever-growing need for portable, damage resistant solar panels. Backed by a stainless steel substrate and protected by a laminated Tedlar cover, the Dura-Series panels offer a perfect solution for marine, camping, military and vandal-resistant applications.

Model	BSP-1012LSS	BSP-3012LSS
Rated Power (Watts)	10	30
Rated Voltage (Vmp)	17.3V	18.8V
Rated Current (Imp)	.58A	1.66A
Open Circuit Voltage (Voc)	21.3V	21.96V
Short Circuit Current (Isc)	0.66A	1.78A

SYSTEM SPOTLIGHT

Location: Avilla Indiana
Application: Grid-Tie Solar System
System: 2.7 KW System with 12 Mage 230 watt panels.

Wellspring Renewable Energy

SOLAR PANEL ACCESSORIES

Tilted Roof Mount System

All aluminum fabricated adjustable tilted roof mount solar panel mount

SOL 2516	2 Panel System	$139.95
SOL 2517	3 Panel System	$197.25
SOL 2518	4 Panel System	$240.63
	Legs - per inch	$0.28

Pole Mount System

Steel powder coated pole with all aluminum framework

12 foot 6” square pole	$155.00
2 Panel Polemount	
3 Panel Polemount	
4 Panel Polemount	
5 Panel Polemount	
6 Panel Polemount	
8 Panel Polemount	

Universal Solar Mount System

SOL 2537	Solar Mount Rail 208”	$0.50
SOL 2538	L Feet for Solarmount Rail	$4.03
SOL 2539	Solar Mount End Clamp F	$2.06
SOL2540	Solar Mount Mid Clamp E-F	$2.30
SOL 2541	Weeb-UMC Ground Clip	$1.68
SOL 2544	Weeb Lug with Terminal Screw	$8.70

Sun Star freezers are one of the most energy efficient appliances on today's market. Designed for solar applications, these freezers consume minimal power and require a smaller photovoltaic (PV) system than normal electric freezer.

9 Cubic Foot

4.5 inch polyurethane walls
Air cooled condensor for fast cool down
Coated steel interior for good looks and easy cleaning
Operating lights for easy trouble shooting
Two in one thermostat (refrigerate or freeze)

Freezer Only	$1093.00
Complete System - Solar Freezer, PV Panels, Batteries, and Charge Controller	

14 Cubic Foot

4.5 inch polyurethane walls
Air cooled condensor for fast cool down
Coated steel interior for good looks and easy cleaning
Operating lights for easy trouble shooting
Two in one thermostat (refrigerate or freeze)

Freezer Only	$1426.00
Complete System - Solar Freezer, PV Panels, Batteries, and Charge Controller	

Refrigerator

Top Refrigerator / Bottom Freezer
Unique Neutral Gray Style
Automatic Interior LED Lights
Adjustable Shelving In Refrigerator Compartment
Drawers Included In Freezer Compartment
New Compact Design

Refrigerator Only	
Complete System - Solar Freezer, PV Panels, Batteries, and Charge Controller	

DC Combination Refrigerator & Freezer

After many requests for an upright model from customers, SunDanzer is proud to present the new upright combination refrigerator and freezer. This unit is engineered with the same ultra high efficiency you have come to expect from SunDanzer. This low energy consumption saves you money by requiring a smaller energy system to run These units fulfill another customer request by combining our refrigerator and freezer into one. Conserve space by having both systems in one place, all with SunDanzer's high efficiency and low energy and system requirements.

Specifications:

- **Upright Combination Refrigerator and Freezer**
- **Total Capacity: 14.1 cubic feet**
- **Thick Insulation**
- **High Efficiency**
- **Low System Costs**

LA-302-DC $119.00

MID 5032 115V
MID 5033 300V
Midnite AC or DC Lightning arrestors are available in 115 volt, 300 volt or 600 volt.

MNPV3 $86.26

PV module combiner box for up to 3 DC breakers

MNPV6 $106.92

PV module combiner box for up to 6 DC breakers

MC4

Solar line 2 male/female PV wire cables

6 ft. Cable	$25.00
15 ft. Cable	$30.00
30 ft. Cable	$39.00
50 ft. Cable	$52.00
100 ft. Cable	$84.00

MC4

Solar Line 2 Branch Connectors

Solar line 2 branch coupler female - 2 male	$18.40
Solar line 2 branch coupler male - 2 female	$19.55

Sola Deck $207.10

Roof mount enclosure/combiner bar is designed to satisfy typical roofing standards by flashing into the roofing system. Sola Deck is a listed UL50 - Type 3R enclosure constructed of stamped 18 gauge galvanize steel and powder coated to industry standards.

MC

Solar Line 2 to Solar Line 1 Connector

Solar line 2 male to Solar line 1 female adapter	$13.00
Solar line 1 male to Solar line 2 female adapter	$13.00

SG-4 $31.71

BATTERY CHARGE CONTROLLER
12 volt 4.5 amps

MORNINGSTAR $51.43
SUNSAVER 10

A very reliable charge controller.
Uses the same battery charging algorithm as the ProStar and offers many of the advantages of the ProStar for smaller systems, at a reduced cost. Constant voltage pulse width modulation (PWM) charging is a proven advance compared to the common on/off PV regulators. SunSavers are field-selectable for sealed or flooded batteries. 6" x 2.2" x 1.3"

PS-15 $107.14

MORNINGSTAR PROSTAR CHARGE CONTROL
A sophisticated charge controller for your solar system with many nice features. Use with 12 or 24 volt system up to 15 amps.

PS-15M $167.14

Same as PS-15 with Digital Display

PS-15-48V $223.20

Same as PS-15 but for 48 volt and Digital Display

PS-30M $207.14

Same as PS-15 but for 30 amp and Digital Display

SUN SAVER DUO $188.50

An advanced PWM two battery controller for RV's, caravans, boats, and cottages. This product will charge 2 seperate and isolated batteries at the same time, based on user selectable prioities.

FLEX MAX 60 $630.00

Rated for up to 60 amps of DC output current, the MX60 can be used with battery systems from 12 to 60 VDC with PV open-circuit voltage as high as 140 VDC. The MX60 set points are fully adjustable to allow use with virtually any type of battery. The MX-60 also allows you to use a higher output voltage PV array with lower voltage battery

FLEX MAX-80 also available

MORNINGSTAR SUNSAVER $268.97

MPPT 15 AMP charge controller for 12 or 24 volt PV systems

Solar Charge Controller

12-24 volt Solar Charge Controller with PWM Technology and LCD

SOL 2562	6.6 amp Solsum	$40.23
SOL 2563	8.8 amp Solsum	$38.61
SOL 2564	10.10 amp Solsum	$58.76

Tracer Charge Controller

The Tracer Charge Controllers are 12 or 24 volt MPPT with 150 volt input on the 20-30 amp models and 100 volts on the 40 amp.

SOL 2571	20 amp Tracer	$175.00
SOL 2572	30 amp Tracer	$275.00
SOL 5078	40 amp Tracer	$37.50
SOL 2573	Digital Readout	$285.00

SOL2575 $158.33

30 amp 12-24 volt PWM Controller that is flush mount.
Designed for RV applications.

SOL2574 $75.00

30 amp 12-24 volt PWM Controller that is flush mount.
Designed for RV applications.

SOL2576 $43.55

30 amp 12-24 volt PWM Controller that is flush mount.
Designed for RV applications.

MAGNUM
ENERGY

Magnum Panel Systems

UL1741 Interconnection System Equipment

The Powerful Difference

SOL8002

The KID is the most versatile small charge controller on the market. It allows true parralleling for system expansion and allows up to 162VOC. MPPT Technology and charges 12-24-36-48 volt.

Classic Controller

The Classic Controller is the most advanced controller available with the VOC input from 150-250 volts, Arc fault protection and True Parraleling. These controllers can get the ultimate power from your solar system.

SOL 2567	ClassicMPPT 150	$750.00
SOL 2568	ClassicMPPT 200	$750.00
SOL 2569	ClassicMPPT 250	$838.00

SYSTEM SPOTLIGHT

Location: Indiana
Application: Remote Agriculture Hog Farm
System: 17,600 watt Magnum inverter system w/1500 A.H. 48 volt battery bank.
Installed by Wellspring RE Power

RTS $32.54

MORNINGSTAR
Remote temp sensor.

TRI-STAR

The Tri-Star controller is a three function controller that provides reliable solar battery charging, load controller or diversion regulation. 5 year warranty. 45 or 60 amp up to 150 volts open circuit.
Robust Thermal design; no fans

TS-45	45 amp controller	$192.86
TS-60	60 amp controller	$258.00
TS-Meter	Digital Meter	$120.00

Trimetric 2020 $166.15

AH meter

Mounting Box $13.31

This amp-hour meter for 12 or 24 volt battery systems reads volts, amps & amp hours on an LED display. Records minimum maximum voltage, days since batteries were charged, days since equalized, and total lifetime amp-hours withdrawn from batteries & many more features.

DVM-12 $43.29

Measures volts in 12, 24 or 48 volt systems. High quality, low cost LCD digital meter. Surface mount. 3" x 2" 1" enclosure.

DAM-12 $67.00

Digital amp meter with a 100A shunt.

ANALOG AMPMETER

AnalogMeter 0-30ADC $27.15
AnalogMeter 0-60ADC $37.92
These high quality amp meters are very smooth and accurate. The shunt is built into the 30-amp meter so it can be in series with the load to be measured on the neg. or pos. wire. The 60 amp meter comes with a seperate shunt.

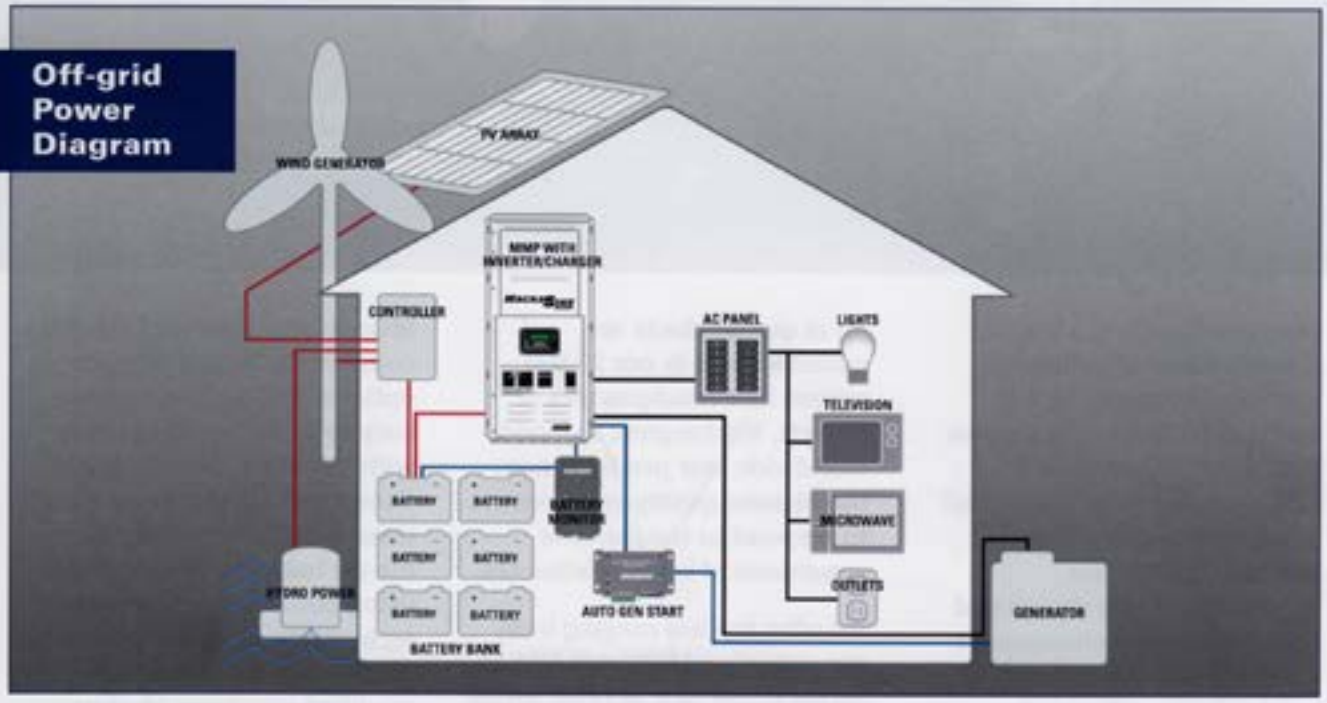
WCC-12 $21.16

Voltage meter w/6 color lights showing your battery charge from a low of 11.8 V to a 12.8 V high. Hook up direct with power or

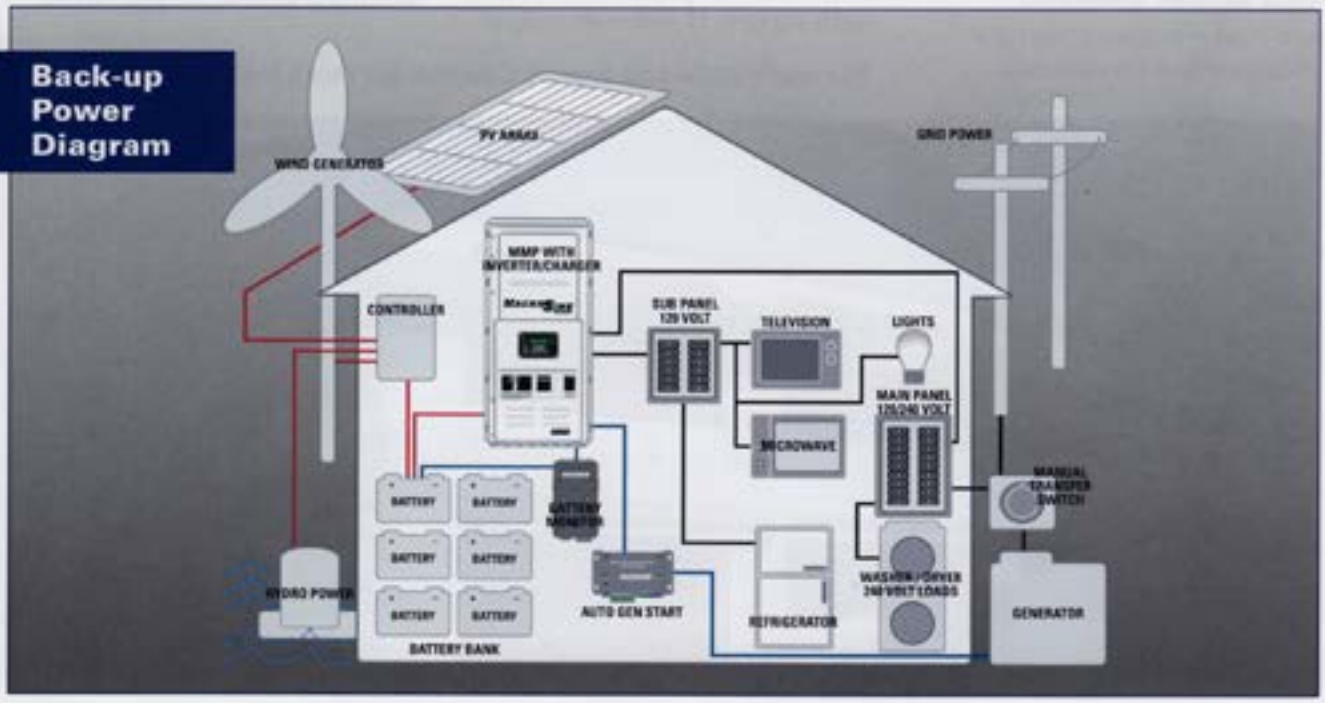
Renewable Energy and Magnum Products

For reliable power regardless of grid connectivity, Magnum inverter / chargers, interconnection system equipment, and accessories are a solid base to build a back-up or off-grid power system. With models available in 12, 24, and 48-volt configurations and power output from 600 to 4400 VA, and systems up to 17,600 VA you'll be sure to find the components right for your situation.

Off-grid Power Diagram

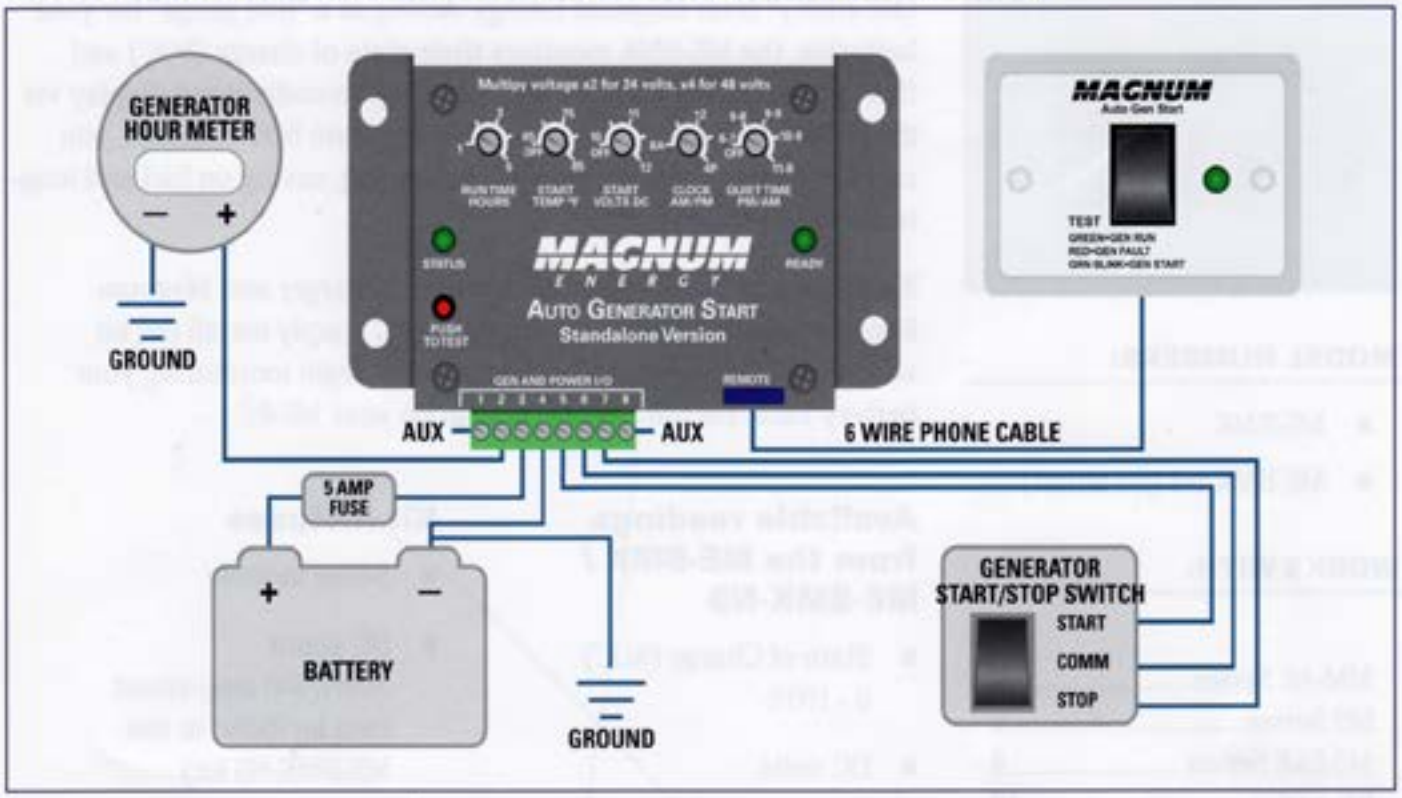


Back-up Power Diagram

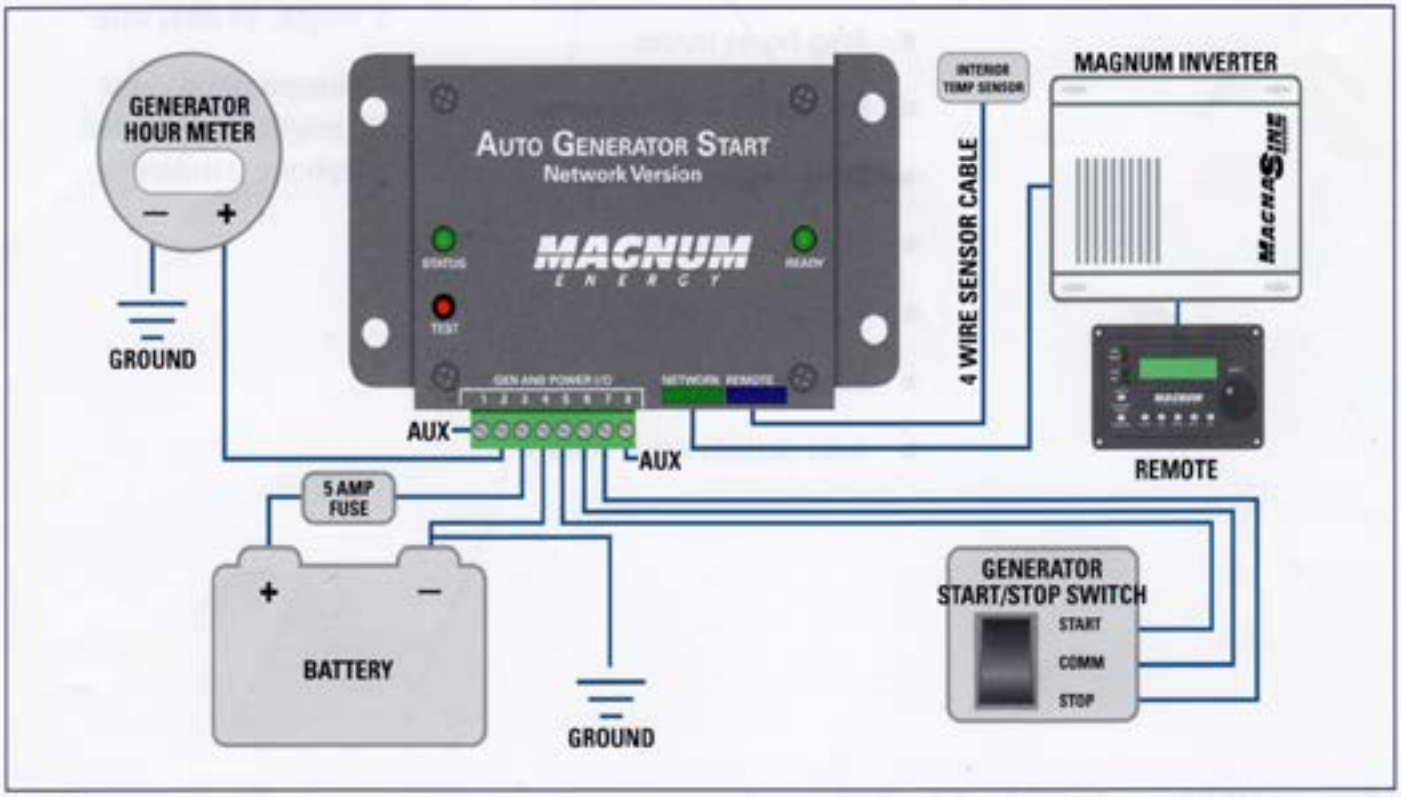


MAGNUM ENERGY

AGS Wiring Diagram for Stand Alone Systems (ME-AGS-S)



AGS Wiring Diagram for Networked Systems (ME-AGS-N)



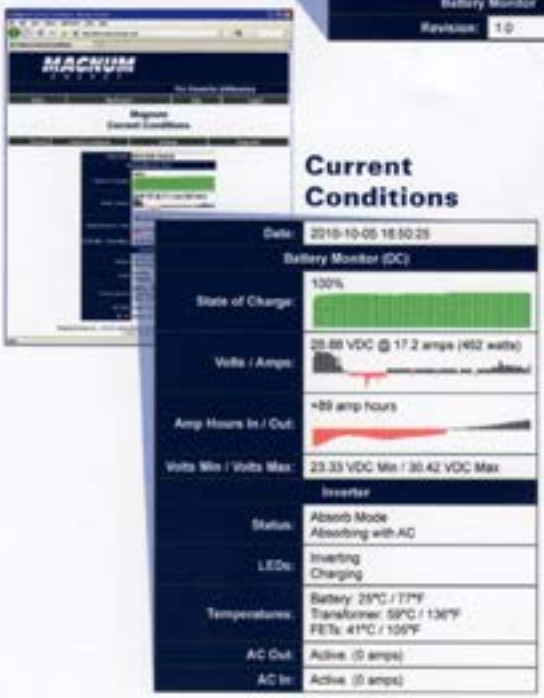
* AGS-N features require Remote rev 1.6 and AGS rev 4.0 or higher.

The MagWeb: Web Monitoring Kit

The MagWeb is a powerful and cost effective tool for remotely monitoring Magnum Energy's inverters and accessories. Installed on the Magnum network, the MagWeb provides live Internet monitoring of the inverter, battery monitor, and automatic generator start module. Using your always on Internet connection, the MagWeb makes live and historical conditions available to you through a web browser at **data.magnumenergy.com**.

Data Samples

The MagWeb constantly streams data to your personal web pages, providing details on Current Conditions, Current Settings, and Daily Summaries for historical records. The samples below provide snapshots of the standard web pages.


Current Conditions
Date: 2010-10-05 18:50:25
Battery Monitor (DC)
State of Charge: 100%
Volts / Amps: 26.88 VDC @ 17.2 amps (462 watts)
Amp Hours In / Out: +89 amp hours
Volts Min / Volts Max: 23.33 VDC Min / 30.42 VDC Max
Inverter
Status: Absorb Mode
Absorbing with AC
LEDs: Inverting
Charging
Temperatures: Battery: 25°C / 77°F
Transformer: 59°C / 136°F
FETs: 41°C / 105°F
AC Out: Active. (0 amps)
AC In: Active. (0 amps)

MODEL NUMBERS

- ME-MW-W (wireless)
- ME-MW-E (ethernet)

WORKS WITH:

WEB BASED MONITORING

- **Inverter/Charger**
  - Status
  - Program Settings
  - Faults
  - DC volts, DC amps
  - Invert, Charge LEDs
  - Tech menus
- **Battery Monitor status**
- **Auto Gen Start (AGS) status**

MAGNUM ENERGY

use the momentary switch or panel.
Panel is 2¾" high. Same as other switch panels.

PD-Block $71.86

Use these to split primary power into secondary circuits, or join cables from a solar array to a power lead-in cable.
Primary wire of #8 to 2/0.
Secondary wire, 6 spaces, #14 to #6

Splicer Block $29.75

Splice wires up to #2/0 cable. 2 pole

TERMINAL BLOCK $6.65

10 Gang Screw Type Terminal Block
These individual gang/non bussed terminal blocks provide a common area to neatly connect multiple wire connections.

DISTRIBUTION BLOCK $16.95

8 Point Power Distribution Block
Block with a 3/8" post and 8 #8-21 connection screws.

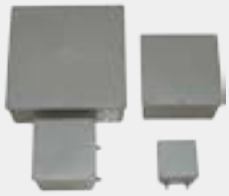
JUNCTION BLOCK $23.62

Stud Type Junction Block
Ideal for mounting directly onto any flat surface and is rated for up to 200 amps.

FUSE BLOCKS

8Gang Fuse Block	$10.34
6Gang Fuse Block	$18.02
4Gang Fuse Block	$4.29

PLASTIC ELECTRICAL BOXES



These boxes are great to use to mount charge controllers, stop switches, circuit boards, etc. UL listed

12x12x6 Plastic Box	$44.15
8x8x4 Plastic Box	$27.91
6x6x4 Plastic Box	$16.89
4x4x2 Plastic Box	$9.61

WCC-12P $27.27

Portable WCC-12 volt meter
Easy to use and understand

DT-830B $19.91

DIGITAL MULTIMETER
DC volts, AC volts, DC amps

08751 $17.89

DIGITAL VOLTMETER
Nice and handy portable meter with digital readout.
Divide voltage in half for 6-volt batteries.

Kill-A-Watt $48.57

AC METER
This kilowatt-hour meter is easy to set up and use. It gives the user power usage information for individual appliances. UL listed

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AC Voltage Sensor $23.50

Senses AC voltage

Kestel 1000 $87.75

POCKET METER
The Kestel 1000 measures instantaneous maximum and average wind speeds.
Measurement unit options are knots, meters per second, kilometers per hour, miles per hour, feet per minute and Beaufort.
Just hold it up to measure the wind.

Acurite Weather Station $89.95

Weather station gives you wind speed, temperature, windchill, barometric pressure, and future forecast.
Completely wireless

Water Heating Element $103.93

LOW VOLTAGE
These low voltage water heating elements are used as a diversion load for wind or hydro electric systems. 12v or 24v 29.2 amp.

Magnum Fuse Blocks $52.99

Single pole Class T fuse blocks to fuse invertores or other large loads.

ME-125F	125 Amp fuse block assembly	$39.92
ME-200F	200 Amp fuse block assembly	$39.92
ME-300F	300 Amp fuse block assembly	$76.99
ME-400F	400 Amp fuse block assembly	$81.27
T-300	300 Amp replacement fuse	$61.10
T-400	400 Amp replacement fuse	$61.10

MAGNUM INVERTERS

Inverter/Chargers for Off Grid Applications. A new generation inverter designed specifically for off grid use. You asked and Magnum listened. Many features such as Modified & True Sine Wave, more charging capacity, easy-to-install, lightweight, remote-control with the new one-knob™ programming & more.

PANEL SYSTEMS

Stackable Inverters & Panels

MS4024PAE	4000W, 24V inverter/APEC charge	$2198.75
MS4448PAE	4400W, 48V inverter/APEC charge	$2198.75
ME-RTR	Router for PAE series inverters	$325.05
MMP250-30D	Mini panel w/250A DC breaker 30A dual in	$623.66
MMP250-60S	Mini panel w/250A DC breaker 60A single in	$623.66
MMP175-30D	Mini panel w/175A DC breaker 30A dual in	$623.66
MMP175-60S	Mini panel w/175A DC breaker 60A single in	$623.66
MPLS-30D	Single enclosure low profile w/30A input	$813.75
MPLS-60S	Single enclosure low profile w/60A input	$813.75
MPSH-30D	Single enclosure high power w/30A input	$1420.22
MPDH-30D	Dual enclosure high power w/30A input	$2234.87
MPX-30D	Extension box w/250A DC breaker 30A	$297.80
MPX-60S	Extension box w/250A DC breaker 60A	$297.80

RD SERIES - Modified sine wave

Transfer relay capability:
2 legs at 30A for 120 V/30 or 240 V/50 A service.

RD 1824	1800W, 24V Inverter/60A PFC charger	$1050.90
RD 2212	2200W, 12V Inverter/110A PFC charger	$1188.58
RD 2824	2800W, 24V Inverter/80A PFC charger	$1367.81
RD 3924	3900W, 24V Inverter/120A PFC charger	$1612.20

MS SERIES - Pure sine wave

Transfer relay capability:
2 legs at 30A for 120 V/30 or 240 V/50 A service.

MS 2012	2000W, 12V Inverter/100A PFC charger	$1709.96
MS 2812	2800W, 12V Inverter/125A PFC charger	$1954.36
MS 4024	4000W, 24V Inverter/105A PFC charger	$2117.29

MS-AE 120/240V SERIES-Pure sine wave

Transfer relay capability:
60 amps at 120VAC, 30 amps per pole 120/240 VAC split phase. This unit will produce 120 & 240 VAC

MS4448AE	4400W, 48V Inverter/60A PFC charger	$2198.75
MS4024AE	4000W, 24V Inverter/60A PFC charger	$2198.75

MM-AE SERIES - Modified sine wave

MMS1012	1000W, 12V Inverter/50A PFC charger	$976.77
MM 612AE	600W, 12V Inverter/30A PFC charger	$487.98
MM 1512AE	1500W, 12V Inverter/70A PFC charger	$849.00

MAGNUM ACCESSORIES & OPTIONS

ME-AGS	Automatic generator start module with voltage and temp start	$268.02
ME-RC50	Digital LCD display remote panel with 50' cable	$186.56
MM-RC25	6 LED remote with 25' cable Use with MM 612AE & MM 1212AE	$48.06
ME-SSI	Series stacking interface - fits RD & MS series only	$64.36
M-BMK	Batt. monitoring kit. State of charge meter (includes 500a/50mv DC shunt	$162.12
ME-MW-W	Wireless Monitor	
ME-MW-E	Ethernet Monitor	

MIDNIGHT SOLAR E PANELS

Magnum invertor mounted on E panel

MSEP 250	E panels for the RD and MS series Magnums. Prewired w/main 175A DC breaker	$480.38
MSEP 175	E panels for the MS 4448 MagnumPrewired w/main 175A DC breaker	$699.13

MN BABY BOX $31.50

Encloses up to 4 MNEPV or MNEAC DIN rail breakers. 3" x 3" x 7" and weighs 2 lbs.

MNTBR $14.88

5" Terminal bus bar for electrical boxes.

MNTBB $14.88

5" Terminal bus bar for electrical boxes.

MNTBW $14.88

5" Terminal bus bar for electrical boxes.

MNGBB $10.50

4" Terminal bus bar for electrical boxes.

DIN Rail DC Breakers

MNEPV10 10A DC breaker	$11.38
MNEPV15 15A DC breaker	$11.38
MNEPV20 20A DC breaker	$11.38
MNEPV30 30A DC breaker	$11.38
MNEPV50 50A DC breaker	$11.38

DIN Rail AC Breakers

MNEAC10 10A AC breaker	$13.13
MNEAC15 15A AC breaker	$13.13
MNEAC20 20A AC breaker	$13.13
MNEAC30 30A AC breaker	$13.13
MNEAC50 50A AC breaker	$13.13

MNTS FUSE HOLDER $11.75

Touch safe fuse holder DIN rail. Mount up to 600V 30amp. Use in MNPV combiners.

Fuses 1	$8.65
Fuses 4	$9.65
Fuses 6	$10.65
Fuses 8	$11.60
Fuses 10	$12.60
Fuses 12	$13.60

PSC-15AOB $36.25

12 volt 1.5 amp fully automatic On-Board maintainer/charger.

PS-1022MA $66.99

10-2 amp 12 volt fully automatic/manual charger

PSW-22 $258.0

6/12 volt 225/125/40/20/2 amp starter/charger with wheel kit

NOCO Genius Wicked Smart Chargers

Fully automatic 6-12-24 volt chargers with boost charge

G750	6-12 volt / 750 mA	$30.27
G1100	6-12 volt / 1100 mA	$43.41
G3500	12-24 volt / 3500 mA	$61.00
G7200	12-24 volt / 7200 mA	$101.39
G26000	12-24 volt / 26000 mA	$273.52

PS-1 $197.08

Professional Series one 15 amp output. 5 ft. battery cables and 3 ft plug-in cable. Fully automatic charger. Extremely heavy duty

100X010 $99.95

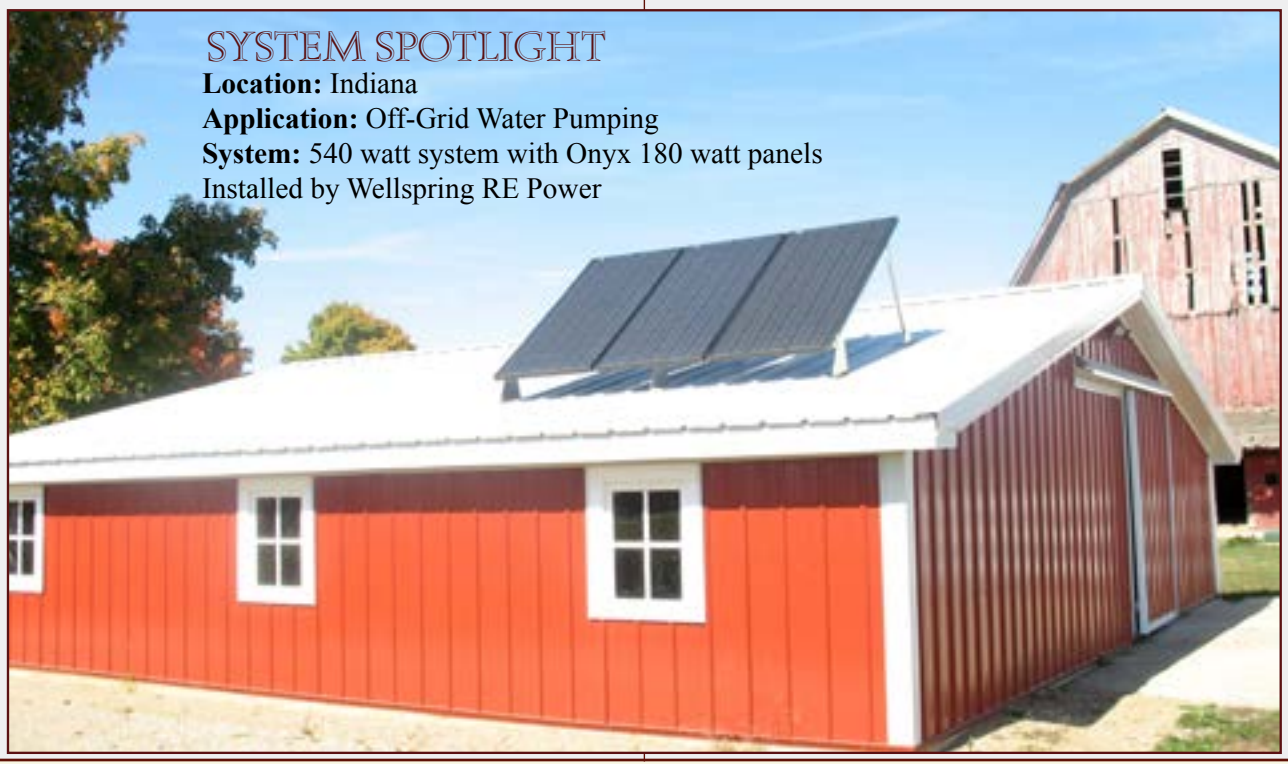
12 volt 2.5 amp maintenance pulsing charger.

100X200 $189.95

12 volt 2.5 amp maintenance dual station charger with pulsing technology

SYSTEM SPOTLIGHT

Location: Indiana
Application: Off-Grid Water Pumping
System: 540 watt system with Onyx 180 watt panels
Installed by Wellspring RE Power



CONSTANT VOLTAGE REGULATORS

Charge 12V batteries from a 24 or 48 volt battery bank

PPT 48-10R14.1	Input 48VDC Output max. 10A-14.1VDC	$255.55
PPT 12/24-20R14.1	Input 24VDC Output max. 20A-14.1VDC	$209.85

INTELI-POWER CONVERTERS w/charge wizard

Solid-State electronic power converter/chargers. Built in microprocessor that constantly monitors battery voltage. 3-stage charging, BOOST (14.4 volts) NORMAL (13.6 volts) STORAGE (13.2 volts).

PD-9180AV	12 volt / 80 amp	$271.15
PD-9170AV	12 volt/ 70 amp	$229.43
PD-9160AV	12 volt/ 60 amp	$208.58
PD-9145AV	12 volt / 45 amp	$182.51
PD-91106	TCMs Module 14.4v	$8.69

Use PD-91106 module on 9100 series for constant 14.4 volt charging

---

ITS-30R $137.14

30 amp automatic transfer switch/120 volt. A time delay feature allows the generator to warm up before the transfer takes place. It can be used as a simple time delay power switch w/small generators. It is important to use power time delay when using battery chargers with generators so they do not go through a low voltage phase at start up.

TRANSFORMERS

12/48-30 Amp $464.71

DC Autotransformer

12/48-10 Amp $235.00

High-efficiency DC to DC converters can be used to step-up or step-down battery voltage.

SDC-15 $77.87

24/12 12 amp

SDC-20 $98.37

24/12 20 amp

These DC-DC converters are designed to decrease the DC voltage that is input into the unit.

IDC-100B-12 $134.60

8 amp

IDC-200B-12 $156.30

15 amp 24 - 12 volt converters

STEP 7 $95.60

These converters go from 12v DC input to 24v DC output. 7 amp load continuous

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IDC-360A-24 $302.90

15 amp

These converters are designed to step-up input voltage.

ELN-60-12 $53.95

Class 2 Power Supply

- **Input 100-240v AC 1.2A**
- **Output +12vDC 5.0A**

SEC 400

Automatic Power Line Conditioner
Max output 400 VA
iNPUT VOLTAGE 85-135 v 160hz
Output voltage 115v

POWER PULSE

BATTERY DESULFATOR

Power Pulse generates on intermittent, optimized high frequency pulse that reduces existing sulphate deposits and keeps them from building up again.

PP-12-L	12 volt	$48.60
PP-24-L	24 volt	$57.78
PP-36-L	36 volt	$66.96
PP-48-L	48 volt	$76.14

12 Volt Digital Timer $63.01

7 day-8 event digital clock based programmable load controller. Multiple load ON and OFF times can beprogrammed with it's own unique timing pattern.

VCS-1AL $132.55

VOLTAGE CONTROLLED SWITCH

Switch to activate your automatic start by battery voltage. Voltage controlled switch is a power relay, which has user adjustable voltage setpoints. Self contained in metal box.

Dusk/Dawn Switch

Turn ON light at dusk, OFF at dawn. Water proof construction fits into 1/2" knockout.

DD Switch	Dusk/Dawn switch	$62.33

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12 VDC Motion Sensor

This motion sensor detects heat and movement to activate 12 volt lighting and is rated for outdoor use in wet locations. The sensor includes sensitivity adjustments and will allow day or night operation. Adjustable timer for 5 seconds to 12 minutes. Range 50' x 110° wide. Fits into 1/2" knockout & UL listed.

12VDCMS	Max Load 8 amps	$110.27

12 Volt Photoswitch $35.62

Dusk to Dawn controller is completely waterproof. In standby mode it consumes only 0.15mA, yet is capable of supplying up to 10A of load current.

12 Volt Relay $4.60

12 volt, 30/50 amp
With mounting bracket

Samlex Sam Series

Modified Sine Wave power inverters

SAM-100-12	Modified 100 watt samlex inverter	$19.45
SAM-250-12	Modified 250 watt samlex inverter	$26.95
SAM-450-12	Modified 450 watt samlex inverter	$38.75
SAM-800-12	Modified 800 watt samlex inverter	$67.50
SAM-1000-12	Modified 1000 watt samlex inverter	$108.65
SAM-1500-12	Modified 1500 watt samlex inverter	$205.32
SAM-2000-12	Modified 2000 watt samlex inverter	$291.50
SAM-3000-12	Modified 3000 watt samlex inverter	$439.00

SAMLEX SSW SERIES

PSE Series Modified Sine Wave power inverter by Samlex is a heavier duty inverter. Designed for rugged applications.

INV3526	PSE 1250 watt 12 volt Inverter	$308.00
INV3527	PSE 1250 watt 24 volt Inverter	$293.00
INV3528	PSE 1750 watt 12 volt Inverter	$376.00
INV3529	PSE 1750 watt 24 volt Inverter	$369.00
INV3530	PSE 2750 watt 24 volt Inverter	$773.21

SYSTEM SPOTLIGHT

Location: Indiana
Application: Off-Grid Home System
System: 1 KW Solar 1KW Wind with 6 Evergreen 165 and a Whisper 200
Installed by Wellspring RE Power

SAMLEX PST SERIES

Pure Sine Wave Power Inverters

SA-2000K-112	Pure Sine Wave 2000 watt inverter	$989.00
PST-15S-12A	Pure Sine Wave 150 watt inverter	$119.75
PST-30S-12A	Pure Sine Wave 300 watt inverter	$154.00
PST-60S-12A	Pure Sine Wave 600 watt inverter	$251.32
PST-100S-12A	Pure Sine Wave 1000 watt inverter	$461.22
PST-150S-12A	Pure Sine Wave 1500 watt inverter	$563.22
PST-200S-12A	Pure Sine Wave 2000 watt inverter	$738.60

RESCUE 960 $165.71

Built in 300 watt inverter w/18AH Battery, Air Compressor, Jump Start,Worklight, Battery status gauge and 110 volt charger cord

240 VOLT PLUG $36.40

220/240 volt twist lock.

110 VOLT PLUG

30 amp 110 volt male	$4.54
30 amp 110 volt female	$7.81

SQUARE D BREAKER BOX $55.82

6 Space, 100 amp, 240 volt breaker box with lid.

SQUARE D BREAKERS

120 volt, 240 volt, square D breakers

120 volt single pole	10 amp	$18.95
120 volt single pole	15 amp	$18.95
120 volt single pole	20 amp	$18.95
120 volt single pole	30 amp	$18.95
120/240 volt	10 amp	$24.04
120/240 volt	15 amp	$24.04
120/240 volt	30 amp	$24.04

HOUR/TACH METER $39.84

Hour meter for all Yamaha Generators

YAMAHA GENERATORS & PUMPS

EF2000IS	2000 Watt Brushless Inverter	Call for pricing
EF1000ISC	1000 Watt Brushless Inverter	Call for pricing
EF2400ISJ	2400 Watt Brushless Inverter	Call for pricing
EF2800IJ	2800 Watt Brushless Inverter	Call for pricing
EF3000ISE	3000 Watt Brushless Inverter	Call for pricing
EF3000ISEB	3000 Watt + B. Brushless Inverter	Call for pricing
EF4500ISE	4500 Watt Brushless Inverter	Call for pricing
EF6300ISDE	6300 Watt Brushless Inverter	Call for pricing
EF2600J	2600 Watt Brushless Generator	Call for pricing
EF4000DEC	4000 Watt Brushless Generator	Call for pricing
EF5200DEJ	5200 Watt Brushless Generator	Call for pricing
EF6600DEJ	6600 Watt Brushless Generator	Call for pricing
EF12000DEX	12000 Watt Brushless Generator	Call for pricing
YP20GH	160GPM Dewatering Pump	Call for pricing
YP30GH	260GPM Dewatering Pump	Call for pricing

VOLTAGE MONITOR SWITCH

Starts generator on your battery voltage. Stops generator based on time. Timer is adjustable from 1 hr. - 8 hr.

VMS for 12-24 volt	$209.33
VMS for 12-24 volt w/meter	$260.00
VMS for 36-48 volt	$222.67
VMS for 12-24 volt w/meter	$273.33

LINE SPLITTER $7.25

Use this on your auto start for multiple connections

MAX40230 $24.26

BATTERY-POWERED MOTION ACTIVATED LIGHT Black or White 4.8"x 4.2"x 5.7" 5 LED lights automatically turn on when motion is detected within a 10 foot radius. Uses 4 replaceable C cell alkaline batteries (not included) which last up to 1 year under typical usage.

MAX 40217 $53.05

MOTION-ACTIVATED 14 LED SECURITY SPOTLIGHT 5"x 7"x 8.3" Includes three AA 900 mAh rechargeable batteries. When charged in full sunlight, light can activate up to 180 times when on for 1 minute at a time. Uses free energy from the sun. No operating costs!

MAX 40224 $73.15

MOTION-ACTIVATED LED SECURITY SPOTLIGHT One of the brightest solar lights with 50 LED's

12 Volt Florescent Floodlight

These weatherproof lights are designed to meet the demand for solar power sign lighting and area lighting. They have 1/2" male pipe thread mounts. Uses an electric ballast that will operate down to -20°. Uses 1 amp at 12VDC.

13 watt 12v	Florescent Floodlight	$72.42
26 watt 12v	Florescent Floodlight	$47.91

DC Wash Machine Motor $342.00

12VOLT DC MOTOR Set up comes complete w/mounting bracket, 9' wire, pulley and belt. Motors can also be set up for small drill presses, etc. Takes less than 20 AMPS while providing lots of power.

Battery Box Power Vent

Power vent to vent battery boxes. To prevent hydrogen gas build up. Dimensions: 4" diameter x 7.25" with a 2" PVC pipe socket on the inlet and outlet. Uses 3 watts and pushes 6 CFM

Power vent 12 volt	$76.25
Power vent 24 volt	$76.25

SunRotor Solar Pump

- **0 - 210' Total lift capacity.**
- **4 - 6 GPM pump rates (Helical Rotor pumps)**
- **8 - 28 GPM pump rates (Centrifugal pumps)**
- **Brushless Permanent Magnet DC drive motor**
- **24 - 48 VDC operating voltages**
- **Very simple and dependable - only one moving part in the pump**
- **Very easy to rebuild with common hand tools.**

SunRotor helical rotor (progressive cavity) pumps are a cost-effective alternative to submersible diaphragm solar pumps. The SunRotor model SRP-4-150-24 is a 4 gpm pump that has the ability to lift water from up to 100' when powered by as little as 130 watts of solar power and up to 150' when powered by only 170 watts. The SunRotor model SRP-4-150-24 will run efficiently with two 12 volt solar panels or one 24 volt solar panel which makes this pump an ideal replacement for most 24 volt diaphragm pumps and the cost is comparable to or less than the price of diaphragm pumps.

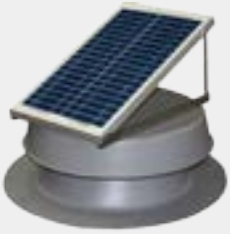
Instead of complicated diaphragms, springs and valves SunRotor helical rotor pump ends contain only one moving part - the rotor. SunRotor pumps are designed to deliver dependable, trouble-free service for many years. SunRotor pump ends are very simple and easily repaired in the field by installing a new rotor/stator kit.

ADDITIONAL BENIFITS OF SunRotor HELICAL ROTOR SOLAR PUMPS

NO annual diaphragm replacements
NO motor brush replacements
NO delicate motor plugs that leak and fail
NO pistons, cams or flapper valves to fail
NO plastic parts
NO electronics in the well

SR4	Call for pricing
SR6	Call for pricing

Natural Light Solar Attic Fan



Attic venting is an important aspect in maintaining a healthy energy efficient home. Proper venting cools your roof extending the material life and reduces the load on your air conditioning system. Attic venting also increases fresh air circulation. Powered completely by free solar energy, this sleek and efficient vent is both compact and quiet. Fully operational right from the box, it installs easily, with no electrical wiring. And let's not forget powerful! Operating up to 850 cfms, a single 10 watt unit can fully vent up to 1,200 square feet. A 20 watt unit, operating up to 1,275 cfms can fully vent up to 2,000 square feet. And our NEW30 watt units have an unmatched venting capacity of up to 2,500 square feet (up to 1,550 cfms).

BEST INDUSTRY WARRANTY: 25 YEARS ON THE HOUSING, SOLAR PANEL AND MOTOR

	Solar Attic Fan	
SAF-10	10 watt solar attic fan	$455.51
SAF-20	20 watt solar attic fan	$557.93
SAF-30	30 watt solar attic fan	$629.36
	Curb Mounted Solar Attic Fan	
SAF-10CM	10 watt solar attic fan curb mounted	$530.36
SAF-20CM	20 watt solar attic fan curb mounted	$685.07
SAF-30CM	30 watt solar attic fan curb mounted	$756.50
	Gable Mounted Solar Attic Fan	
SAFG	10 watt gable mounted solar attic fan	$455.51
SAFG20	20 watt gable mounted solar attic fan	$557.79
SAFG30	30 watt gable mounted solar attic fan	$629.36
SAFTS	Solar attic fan Thermal Switch	$19.64

12 VOLT LED BULBS

5 Watt LED Bulb
12-24 volt
$38.50

8 Watt LED Bulb
12-24 volt
$48.50

10 Watt LED Bulb
12-24 volt
$58.50

12 Watt LED Bulb
12-24 volt
$19.50

20 Watt LED Bulb
12-24 volt
$38.00

16 Watt LED Bulb
12-24 volt
$75.80

33 Watt LED Spotlight
12-24 volt
$74.90

Tube Light
T-8 18 watt LED Lamp 110 volt

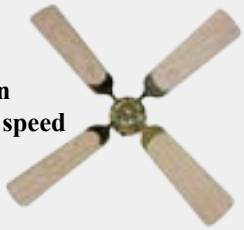
Lamp Holder

Lamp Holder	Holder without chain	$4.48
Lamp Holder	Med. base holder w/pull chain	$4.48
Toggle Switch	Double insulated 20A/125V	$2.58
Panel	Modular panels for ½" dia.	$.53
Light Fixture	Totally enclosed fixture	$33.50

Lamp Kit

12-KIT	Hoop/Socket/Wire/Clamps/Fuse	$11.91
12-KIT/S	The above plus oak spindle	$39.75

Remote Ceiling Fan



12V & 24V
42" four-blade ceiling fan with woodgrain blades and a bright brass housing. The 3 speed reversible motor draws 1.2 amps (on 12v models) at high speed, 0.75 amp at medium speed, 0.5 amps at low speed.

12-volt ceiling fan 42" woodgrain w/remote	$107.50
24-volt ceiling fan 42" woodgrain w/remote	$120.28
Ceiling fan hanging kit - 8"	$18.83

#967 DEGREASER

1 Quart (undiluted) **$6.91 - *$5.18***
1 Case (undiluted) **$36.23 - *$28.62***
Includes 5 qts. plus one free spray bottle.
1 Gallon (undiluted) **$22.71 - *$17.94***
1 Empty Quart w/sprayer **$3.53 - *$2.65***

Dilute with 20-40 parts of water before using. A proven high strength grease cutter. Use on machinery, motors, garage floors, etc. Works great for spotting clothes before washing that are stained with grime, grease, blood, cosmetics, etc.
A proven reliable workhorse in many homes over the years.

12 VOLT FLOOR & WALL LAMPS

12-FMCD	Oak Floor/Mag. Rack/ Carving W/Double magazine rack	$335.64
12-FMC	Oak Floor/Mag. Rack/ Carving	$289.00
12-F	Oak Floor	$232.00
12-FE	Oak Floor Economy	$182.00
12-FS	Floor/Stress Finish & Cherry	$358.62
12-T	Oak Table	$152.95
12-TP	Painted Table	$182.00
12-W	Oak Wall	$139.00
12-WS	Oak Wall/Shelf	$146.95
12-QA	Queen Anne Floor Lamp	$346.00

FREEDOM FANS

Pedestal Fan 402 $369.00

16" OSCILLATING
Variable 16" blade speed & variable oscillating speed. Adjustable height.
Max. current draw-4.0 amps.

Air Circulating 302 $249.00

20" Variable Speed Fan
Tilts to any angle. Plugs into cigarette outlet, and includes adapter for direct connection to battery terminals.
Max. current draw-4.0 amps.

Air Circulating 124 $139.00

12" TABLETOP OR WALL MOUNT
Tilts to any angle. 12 volt battery powered.
Available with clamps or cigarette plug.

Table Fan 8 $35.00

8" Fan blades, 2 speeds, 90 degree oscillation.
Tilts to any angle.

1100 WH Endless Breeze

$60.00
14" 12 volt fan. 3 speed, swivel legs, & portable. Low amp draw 1.2-2.6. 12 volt plug with cord. Made in USA.
Limited one year warranty.

NOTICE: Wire prices fluctuate a lot.
Actual prices could be higher or lower.

W-1163 $72.05

16 gauge primary wire. Stranded copper conductor. Solid plastic insulation. Specify color: BLACK, WHITE, YELLOW, RED, GREEN, GRAY, BLUE, BROWN. 1000 foot rolls.

W-1164 $37.85

16 gauge primary wire. Specify color: BLACK, WHITE, YELLOW, DARK BLUE, ORANGE, BROWN, GREEN, RED, PINK, PURPLE. 500 foot rolls.

W-1164-A $21.43

16/2 wire. Red/Black. 100 foot.

W1164-14A $29.80

14/2 wire. Red/Black. 100 foot.

W1164-14A-500 $111.09

14/2 wire. Red/Black. 500 foot.

W-1164-14B $34.81

14/3 wire. 100 foot roll

W-1164-14C $45.90

14/4 wire. 100 foot roll

W-1165-14B $58.20

14 gauge 500 ft. roll. Specify color.

W-1166 $153.31

12 gauge primary wire.
Stranded copper conductor.
Solid plastic insulation.
1000 ft rolls. Specify color.

W-1167 $76.75

12 gauge primary wire.
500 foot rolls. Specify color.

W-1168 **$.08**
WIRE TERMINALS
Scotch locks, self strip connectors.
WHITE and BLUE.
Please specify.

W-1169 **$1.62@10 pk.**
WIRE TERMINALS
14 to 16 gauge. Insulated.
¼" female disconnect.

W-1169-A **$1.90@10 pk.**
14 to 16 gauge. Insulated.
3/16" female disconnect.

W-1170 **$1.90@10 pk.**
WIRE TERMINAL
14 to 16 gauge. Insulated.
¼" male disconnect.

W-1171 **$1.50@10 pk.**
WIRE TERMINAL 14 to 16 gauge. Insulated.
Butt connector.

W-1172 **$1.55@10 pk.**
WIRE TERMINAL 14 to 16 gauge.
Insulated. #8 ring terminal.

W-1173 **$1.55@10 pk.**
WIRE TERMINAL 14 to 16 gauge.
Insulated. #10 ring terminal.

W-1174 **$1.67@10 pk.**
WIRE TERMINAL 14 to 16 gauge.
Insulated. ¼" ring terminal.

W-1175 **$1.78@10 pk.**
WIRE TERMINAL 14 to 16 gauge.
Insulated. ⅜" ring terminal.

W-1176 **$1.55@10 pk.**
WIRE TERMINAL 14 to 16 gauge.
Insulated. #8 forked terminal.

W-1177 **$1.55@10 pk.**
WIRE TERMINAL 14 to 16 gauge.
Insulated. #10 forked terminal.

W-1178 **$1.55@10 pk.**
WIRE TERMINAL 14 to 16 gauge.
Insulated. ¼" forked terminal.

W-1169-Y **$1.53@ 6 pk.**
WIRE TERMINALS
12 to 10 gauge. Insulated. ¼" female disconnect.

W-1170-Y **$1.55@ 6 pk.**
12 to 10 gauge. Insulated. ¼" male disconnect.

W-1171-Y **$1.58@ 6 pk.**
WIRE TERMINAL
12 to 10 gauge. Insulated. Butt connector.

W-1172-Y **$1.53@ 6 pk.**
WIRE TERMINAL 12 to 10 gauge.
Insulated. #8 ring terminal.

W-1173-Y **$1.53@ 6 pk.**
WIRE TERMINAL 12 to 10 gauge.
Insulated. #10 ring terminal.

W-1174-Y **$1.70@ 6 pk.**
WIRE TERMINAL 12 to 10 gauge.
Insulated. ¼" ring terminal.

W-1175-Y **$1.72@ 6 pk.**
WIRE TERMINAL 12 to 10 gauge. Insulated

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8 Gauge x 3/16" **$.30**
Insulated ring terminal

8 Gauge x 5/16" **$.30**
Insulated ring terminal

6 Gauge x 5/16" **$.40**
Insulated ring terminal

W-1169-HST **$4.22@ 4 pk.**
16 to 14 gauge. Heat shrinkable.
¼" female disconnect

W-1170-HST **$4.22@ 4 pk.**
16 to 14 gauge. Heat shrinkable.
¼" male disconnect

W-1171-HST **$3.15@ 4 pk.**
16 to 14 gauge. Heat Shrinkable.
Butt connector.

W-1172-HST **$3.28@ 4 pk.**
16 to 14 gauge. Heat shrinkable.
#8 ring terminal.

W-1173-HST **$3.28@ 4 pk.**
16 to 14 gauge. Heat shrinkable.
#10 ring terminal.

W-1174-HST **$3.42@ 4 pk.**
16 to 14 gauge. Heat shrinkable. ¼" ring terminal.

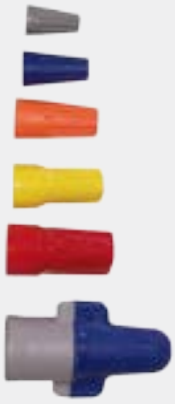
22 - 16 Gauge **$1.62@ 8 pk.**
Gray wire nuts.

22 - 16 Gauge **$1.75@ 8 pk.**
Blue wire nuts.

22 - 14 Gauge **$1.68@ 6 pk.**
Orange wire nuts.

18 - 10 Gauge **$1.75@ 5 pk.**
Yellow wire nuts.

18 - 10 Gauge **$1.95@ 4 pk.**
Red wire nuts.



2-#8 - 4-#10 **$.63 each**
Blue/Gray wire nuts.

W-1179 **$.23**
WIRE TERMINAL 14 to 16 gauge.
Non-insulated. ½" ring terminal.

W-1180 **$1.58 @ 10 pk.**
WIRE TERMINAL Bullet terminal.

W-1300 **$41.43**
Ratchet crimping tool. Will crimp both standard and reinforced (double crimp) terminals in 22-10 gauge. Tool will not disengage until uniform crimp is completed or quick release lever is triggered.

W-1301 **$49.25**
Wire stripper. Spring-loaded stripper to automatically remove wire insulation without crushing ends. Strips 22-8 gauge wire.

EW-1302
Wire cutter and crimper 22-8 ga.

EW-1303
Wire stripper and crimper 22-10 ga.

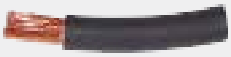
EW-1304 **$41.04**
Wire stripper 6 ga. - 4/0 ga.

C-530 **$.91**
BULK CABLE: 6 gauge battery.
100 ft. roll or cut to any length. Priced per ft.
RED and BLACK are both the same price. Please specify.

C-524 **$1.17**
BULK CABLE: 4 gauge battery.
100 ft. roll or cut to any length. Priced per ft.
RED and BLACK are both the same price. Please specify.

C-522 **$2.04**
BULK CABLE:2 gauge battery.
100 ft. roll or cut to any length. Priced per ft.
RED and BLACK are both the same price. Please specify.

WELD-10 **$3.01**
BULK CABLE (1/0 welding)
BLACK cut to length. Priced per ft.



WELD-20 **$3.80**
BULK CABLE (2/0 welding)
BLACK cut to length. Priced per ft.

WELD-30 **$4.81**
BULK CABLE (3/0 welding)
BLACK cut to length. Priced per ft.

WELD-40 **$6.03**
BULK CABLE (4/0 welding)BLACK cut to length. Per ft.

CUSTOM MADE CABLES

1/0 cable, per inch	$.26
1/0 copper lu/crimp/shrink tube, per end	$3.11
2/0 cable, per inch	$.33
2/0 copper lu/crimp/shrink tube, per end	$3.11
3/0 cable, per inch	$.42
3/0 copper lu/crimp/shrink tube, per end	$3.44
4/0 cable, per inch	$.53
4/0 copper lu/crimp/shrink tube, per end	$4.17

POWER CONNECTOR HOUSINGS

Part #	Amp	Fits Gauge
PSB175 Yellow	175	4, 2, 1/0
PSB175 Red	175	4, 2, 1/0
PSB175 Gray	175	4, 2, 1/0
PSB175 Blue	175	4, 2, 1/0
PSB350 Yellow	350	2/1, 3/0, 4/0
PSB350 Red	350	2/1, 3/0, 4/0
PSB350 Gray	350	2/1, 3/0, 4/0
PSB350 Blue	350	2/1, 3/0, 4/0

Industry Recommended Voltage and Color Selection Chart

Housing Color	Voltage
Yellow	12
Orange	18
Red	24
Gray	36
Blue	48
Green	72
Black	80

POWER CONNECTOR TERMINALS

Part #	Gauge
PSBT4	4
PSBT2	2
PSBT10	1/0
PSBT20	2/0
PSBT30	3/0
PSBT40	4/0

POWER CONNECTOR CAPS

Made from high temperature polyvinyl to protect contact from dirt, dust, water, salt.

$4.25

POWER CONNECTOR CAPS

Makes disconnecting power connector housing easier without putting extra strain on the connectors.

$3.15

NOCO BATTERY TERMINALS

Crimpable. Straight terminal. POS. & NEG.

SB4 Pos or Neg	**$3.43**	**SB20 Pos or Neg**	**$3.92**
SB1 Pos or Neg	**$3.51**	**SB30 Pos or Neg**	**$4.20**
SB10 Pos or Neg	**$3.73**	**SB40 Pos or Neg**	**$4.44**

Crimpable. Flag terminal. POS. & NEG.

RA10 Pos or Neg	**$4.93**	**RA30 Pos or Neg**	**$5.70**
RA20 Pos or Neg	**$4.93**	**RA40 Pos or Neg**	**$6.18**

TC Universal Battery Terminal $1.41

GREEN ZINC
TZ Zinc terminal that fits #6 to 2/0 ga. cable.
Universal for pos. and neg. 10 per card.
Priced per terminal

Marine Terminal End

$2.86

Converts top terminal battery posts to accept tubular copper lugs. 2/blister pack

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Side Terminal Charging Post

$2.06

Converts top terminal battery posts to accept tubular copper lugs. 2/blister pack

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Female Stud Post

$1.84

Converts 3/8" stud post to accept top terminal battery cables. 2/blister pack

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Side Post Terminal End

$1.37

Fits into positive or negative terminals on side terminal batteries. 2/blister pack

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Hefty Copper Lugs

05327	(Hefty copper) 4 gauge w/ ⅜" stud size	$.51
05328	(Hefty copper) 4 gauge w/5/16" stud size	$.54
05329	(Hefty copper) 2 gauge w/⅜" stud size	$.64
05330	(Hefty copper) 2 gauge w/½" stud size	$.66
05333	(Hefty copper) 1/0 gauge w/⅜" stud size	$.95
05334	(Hefty copper) 1/0 gauge w/½" stud size	$1.06
05335	(Hefty copper) 2/0 gauge w/⅜" stud size	$.95
05336	(Hefty copper) 2/0 gauge w/½" stud size	$1.06
05337	(Hefty copper) 3/0 gauge w/⅜" stud size	$1.19
05338	(Hefty copper) 3/0 gauge w/½" stud size	$1.19
05339	(Hefty copper) 4/0 gauge w/⅜" stud size	$1.55
05340	(Hefty copper) 4/0 gauge w/½" stud size	$1.55

34-B6 or R6 $2.50

HEAT SHRINKABLE TUBING
¾" dia. & 6" long. RED or BLACK

12-B6 or R6 $1.60

HEAT SHRINKABLE TUBING
½" dia. & 6" long. RED or BLACK

10-B6 or R6 $3.69

HEAT SHRINKABLE TUBING
1" dia. & 6" long. RED or BLACK

00335 $1.45

CLAMP: (Crimp type) Copper plated steel battery clamp. 10 red and black clamps per card. Priced per clamp.

06143-RED $.65

06144-BLACK $.65

CLAMP: (50 amp) For battery chargers, tune-up and test equipment. Priced each.

00197 $11.05

SURE GRIP BATTERY LIFTER
1 per pack

NCP-2 $1.02
TERMINAL PROTECTOR TOP POST
1 black 1 red per card

NCP-2 Wrap-Around $1.47
WRAP AROUND TERMINAL PROTECTOR
1 green 1 red per card

NCP-2 Spray $3.88
BATTERY CORROSION PREVENTIVE
Aerosol spray
1.00 oz.

NCP-2 Spray $8.40
BATTERY CORROSION PREVENTIVE
Aerosol spray can
12.25 oz. can

NCP-2 Cleaner $8.40
BATTERY CLEANER & ACID DETECTOR
Aerosol spray can
12.25 oz. can

Hydrometer $5.25

Plastic Standard Battery Hydrometer
Large size float type tester
Float is color coded for precise reading

00257 $2.77
BATTERY FILLER BULB
1 per card.

Battery Post / Terminal Cleaner
$3.34

FCIG $6.49
Female lighter receptacle with battery clips.

MCIG $3.52
Male lighter plug.

SAC-101
Twin socket adapter
$5.28

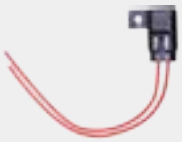
SAC-102
10 ft coiled adapter
$5.03 - *$4.02*

V2730S $3.45
ACCESSORY SOCKET
Lighter plug for your accessories.
Recessed mounted with 2 screws.

TM-8W $36.75
Top post mount battery disconnect.

ATCH-78335 $3.46
10 ga. 35 amp, water tight ATC fuse holder.

ATCH-79001 $3.95
12 ga. 30 amp, weather proof fuse holder w/mounting hole.



ATCH $1.33
16 ga. 20 amp fuse holder

ATCH-Fuses

	5 Per Pack		5 Per Pack
3 amp	$3.25	20 amp	$3.25
5 amp	$3.25	25 amp	$3.25
7.5 amp	$3.25	30 amp	$3.85
10 amp	$3.25	40 amp	$3.85
15 amp	$2.18		

74115-CON $1.73
1-contact connector, 16 ga. x 12”

74215-CON $2.05
2-contact connector, 16 ga. x 12”

AE-Accumanager $64.75

Super fast charger can be powered by AC power or 12V DC and will charge Nickel-Cadmium, Nickel-Metal-Hydride and Rechargeable Alkaline batteries at the same time. One to four AAA, AA, C, D and two 9V batteries can be charged in any combination of sizes and battery chemistry at the same time. It recognizes each battery type and charges them separately.

Accumanager Charger	$67.76
Nickel Metal Hydride AAA Cell 750 mAH	$1.88
Nickel Metal Hydride AA Cell 2200 mAH	$3.62
Nickel Metal Hydride C Cell 4500 mAH	$12.94
Nickel Metal Hydride D Cell 9000 mAH	$18.12

Part #	EN91
Description	AA
Sleeve Qty	24
Case Qty	144
Price Each	$0.43
Sleeve	$10.32

Part #	EN92
Description	AAA
Sleeve Qty	24
Case Qty	144
Price Each	$0.43
Sleeve	$10.32

Part #	EN93
Description	C
Sleeve Qty	12
Case Qty	72
Price Each	$0.76
Sleeve	$9.12

Part #	EN95
Description	D
Sleeve Qty	12
Case Qty	72
Price Each	$1.03
Sleeve	$12.36

Part #	EN22
Description	9V
Sleeve Qty	12
Case Qty	72
Price Each	$1.82
Sleeve	$21.84

Part #	EN529
Description	Lantern
Case Qty	6
Price Each	$8.11

Part #	2009
Description	Lantern (Threaded Post)
Price Each	$23.61

Part #	1209
Description	Lantern
Case Qty	12
Price Each	$2.75
5 Case	$2.16
15 Case	$1.96

UltraLast Batteries

Part #	ULA4AAA
Description	AAA
Pack Qty	4
Pack per Case Qty	12
Pack Price	$1.56

Part #	ULA4AA
Description	AA
Pack Qty	4
Pack per Case Qty	10
Pack Price	$1.63

Part #	ULA100AAAB
Description	AAA
Pack Qty	100
Pack per Case Qty	Bulk Pack
Pack Price	$35.60

Part #	ULA100AA
Description	AA
Pack Qty	100
Pack per Case Qty	Bulk
Pack Price	$23.38

Part #	ULA2C
Description	C
Pack Qty	2
Pack per Case Qty	8
Pack Price	$2.48

Part #	ULA2D
Description	D
Pack Qty	2
Pack per Case Qty	6
Pack Price	$3.08

Part #	ULAN
Description	N
Pack Qty	2
Pack per Case Qty	24
Pack Price	$2.35

Part #	ULA9V
Description	9V
Pack Qty	1
Pack per Case Qty	12
Pack Price	$1.87

Rechargeable Batteries

Part #	ULAGED4AAA
Description	AAA
Pack Qty	4
Ni=MH Specs.	750 / mAh
Case Qty	12
Price 1 Pack	$8.52

Part #	ULAGED4AA
Description	AA
Pack Qty	4
Ni=MH Specs.	2100 / mAh
Case Qty	12
Price 1 Pack	$12.30

Part #	UL2C
Description	C
Pack Qty	2
Ni=MH Specs.	3000 / mAh
Case Qty	12
Price 1 Pack	$9.02

Part #	UL2D
Description	D
Pack Qty	2
Ni=MH Specs.	3000 / mAh
Case Qty	12
Price 1 Pack	$9.64

Part #	UL9V
Description	9V
Pack Qty	1
Ni=MH Specs.	160 / mAh
Case Qty	12
Price 1 Pack	$7.05

Part #	ULCC4H
Description	4 position Charger
Pack Qty	1
Ni=MH Specs.	AAA, AA, C, D, 9V
Case Qty	4
Price 1 Pack	$17.32

Part #	UL8SLOT
Description	Std 8 Slot Mega Charger
Pack Qty	1
Ni=MH Specs.	AA-AAA
Case Qty	6
Price 1 Pack	$23.21

Part #	ULGSOLAR
Description	USB Charger W/2 batteries
Pack Qty	1
Ni=MH Specs.	AA
Price 1 Pack	$28.57

Coin Cell Batteries (Carded)

PART	Retail
192	$1.20
301	$1.20
303	$2.45
309	$1.20
315	$1.20
317	$1.20
319	$1.77
335	$1.20
350	$2.45
357 / SG-13	$1.20
362	$1.20
364	$1.20
365	$2.45
366	$2.37
371	$2.45
377	$1.20
379	$1.77
386	$1.20
389	$1.17
390	$1.77
391	$1.20
392	$1.20
393	$1.20
395	$1.20
625	$1.20
CR1216	$1.20
CR1620	$2.87
CR2130	$1.20
CR2032	$1.20
V6254	$2.87
CR2430	$2.87
CR2016	$2.87

Carded Specialty Batteries

123	$8.05
A23	$1.95
PX28	$5.53
CR2	$7.23
CR2 / 2 pcs.	$14.00
A544/4LR44	$4.22
3V DL2 / 3A	$8.76
AC 13E-S	$10.27

Sealed Lead Acid Bat.

General Purpose Batteries

Part#	Description	L	W	H	Retail
EW6-4.5	6 volt / 4.5 AH	2.76	1.85	4.15	$5.74
EW6-7.0	6 volt / 7.0 AH	5.95	1.30	3.94	$10.37
EW6-12	6 volt / 12 AH	5.95	1.97	3.98	$12.29
EW12-5.0	12 volt / 5 AH	3.54	2.76	4.21	$10.88
EW12-7.0	12 volt / 7.0 AH	5.95	2.56	3.94	$14.24
EW12-12	12 volt / 12.0 AH	5.95	3.86	3.94	$25.26
EW12-17.2	12 volt / 17.2 AH	7.13	3.00	6.57	$33.38
EW12-35	12 volt / 35.0 AH	7.80	5.20	7.69	$57.36

Replacement Battery (sensor light)

PSG-650	6 volt / 5.0 AH	5.28	1.94	3.00	$12.16

Fencer Batteries

EWF6-13	6 volt / 13.0 AH	4.24	2.80	5.55	$16.94
EWF12-13	12 volt / 13.0 AH	8.48	2.80	5.55	$33.88
EWF6-7	6 volt / 7.0 AH Slim Line	5.95	1.30	3.94	$10.37

BATTERY EQUALISER®

BATTERY EQUALISER®

Battery Maintenance in a Bottle

What Is Battery Equaliser?

Battery Equaliser is a non-corrosive, non flamable, liquid battery treatment. Formulated to extend the life and performance of any new or used lead acid battery. For use in motorcycles, autos, trucks, RV's, boat, golf carts and electric forklift batteries.

Battery Equaliser has been tested and proven to be the #1 battery additive WORLDWIDE!

What Does Battery Equaliser Do?

Battery Equaliser improves battery chemistry. This prevents sulfation from occurring in new batteries, and breaks up existing sulfation in older batteries. Battery Equaliser returns batteries as close to new as possible, with continued normal maintenance.

DOUBLES BATTERY LIFE!

(Battery Equaliser will not fix or repair a dead cell.)

GO GREEN!

Battery Equaliser has partnered with several companies to help refurbish batteries and reduce battery waste.

BE PART OF THE SOLUTION WITH BATTERY EQUALISER!

Working for Environmental Protection.

Battery Equaliser makes your battery last longer, delays the disposal of batteries and helps reduce landfill impact and environmental waste. Additionally, Battery Equaliser greatly reduces "gassing" which prevents the release of toxic lead/acid gasses into your workplace, and atmosphere.

Compare these two beakers after a 5 year test!

The electrolyte of the treated battery is clear, sulfation has stayed in solution even after five years of use.

Dramatic test results by a battery manufacturer

Comparison of treated and non-treated C20 batteries shows higher capacitance, (the ability of a battery to store an electric charge) yielding extended battery usage and lower total maintenance costs.

RECOMMENDED FOR USE IN:

ALL FLOODED LEAD ACID BATTERIES

Standard Non-Sealed
Car - Truck - Motorcycle - Airplane

Deep Cycle
Marine - RV - Solar - Golf Cart

Traction
Forklifts - Bus - Electric Cart

Electric Vehicle &
Golf Cart Traction Batteries

Stand-by Power
UPS Back-up Power

Why Control Sulfation?

Sulfation is a residue that remains on the plates of a battery after current is produced. This residue increases with each charge/discharge cycle. Over time the residue/resistance will choke out the batteries ability to produce an electrical current. Historically, over charging or "equalizing charge", has been the only way to deal with this problem. Sulfation is a natural part of the battery's chemistry. Battery Equaliser is the only product on the market to effectively reduce existing sulfation and prevent new sulfation by improving the battery chemistry.

USAGE CHART	
Motorcycle Battery	1/3 oz per cell
12 Volt Car Battery	1/2 oz per cell
12 Volt Deep Cycle Battery	1 oz per cell
6 Volt Car Battery	1 oz per cell
12 Volt Large Truck Battery	2 oz per cell (8HD or 8D
6 & 8 Volt Golf Cart Battery	2 oz per cell
24-36-48 Volt Forklift Battery	3 1/2 oz per cell
Industrial and Unlisted	1/2 oz per 100 Ah per cell
6TN & 6TL Batteries	Military use - 1 oz per cell

Limited Warranty Does Not Effect Battery Manufacturers Warranty!

BE6	6 oz Bottle	$12.95
BE12	12 oz Bottle	$19.95
BE32	32 oz Bottle	$49.95

PRICE LIST Effective October 15 2011
All Prices Quoted Are NON EXCHANGE

ENERGYWISE * Trojan * US Battery

BCI Group	ENERGYWISE Type	CCA 0°F	CA 32°F	Reserve Capacity	Retail	Free Replacement	WARI Months
			ENERGYWISE PROFESSIONAL PLUS SERIES 84 Month				
24	24-84	770	950	120	$76.24	24	84
34/78	34DT-84	850	1000	120	$84.92	24	84
65	65-84	850	1000	160	$83.85	24	84
75	75-84	730	925	100	$72.37	24	84
78	78-84	770	950	120	$80.71	24	84
			ENERGYWISE PROFESSIONAL SERIES 72 Month				
24	24-72	675	835	120	$78.59	18	72
27	27-72	700	850	120	$79.29	18	72
35	35-72	525	630	85	$67.84	18	72
35/75	75DT-72	630	800	90	$75.39	18	72
48/91	41/91-72	690	850	110	$81.16	18	72
45	45-72	495	595	80	$69.20	18	72
51	51-72	450	530	70	$67.15	18	72
51R	51R-72	450	530	70	$67.15	18	72
64	64-72	575	725	110	$78.05	18	72
65	65-72	650	780	130	$76.37	18	72
78	78-72	630	800	100	$73.13	18	72
			ENERGYWISE PROFESSIONAL SERIES 60 Month				
24	24-60	525	630	90	$62.65	12	60
26R	26R-60	450	525	75	$54.55	12	60
75	75-60	525	630	85	$70.23	12	60
			ENERGYWISE 12 volt COMMERCIAL				
3EE	3EE	370	440	100	$83.48	6	30
3ET	3ET	460	550	120	$95.70	6	30
4D	4D-HD	1080	1350	300	$158.66	6	30
4DLT	4DLT	810	970	250	$140.51	6	30
8D	8D-HD	1300	1560	435	$200.61	12	30
29NF	29NF	390	450	90	$152.84	6	40
22NF	22NF	390	450	80	$61.56	6	40
			ENERGYWISE 12 volt COMMERCIAL 31 SERIES				
31A	31A-925	925	1050	180	$96.16	18	36
31S	31S-925	925	1050	180	$96.16	18	36
			ENERGYWISE 6 volt COMMERCIAL				
1	1-HD	625	750	160	$76.32	6	40
2	2-HD	625	750	150	$70.03	6	40
3	3EH	850	1020	280	$104.93	6	30
			ENERGYWISE 8 volt COMMERCIAL				
1-8V	1-8V	360	430	110	$83.61	3	24
			ENERGYWISE LAWN & GARDEN				
U1L	U1L	165	200	17	$28.15	3	18
U1R	U1R-XH	300	360	34	$37.39	3	18
U1L	U1L-XH	300	360	34	$37.39	3	18
22NF	22NF	390	450	80	$75.09	6	40

Marine * Scrubber * Golf

BCI Group Size	ENERGYWISE Type	CCA 0°F	20 Hour Rate AH	Reserve Capacity	Retail	Free Replacement	WARRANTY Months	Cost/Mo
ENERGYWISE MARINE STARTING								
24M	24M-6	800	1000	115	$69.94	18	36	
24M	24M-5	525	650	80	$60.96	18	36	
27M	27M-6	800	1000	180	$79.48	18	36	
TROJAN MARINE/RV PERFORMANCE PLUS SERIES								
24	24TMX	440	85	140	$121.85	18	36	
24	27TMX	530	105	175	$135.20	18	36	
31	SCS225	665	130	225	$173.79	18	36	
ENERGYWISE DEEP CYCLE								
24DC-4	24DC-M	500		120	$68.40	18	36	
24DC-5	24DC-H	400		140	$71.80	18	36	
27DC-6	27DC-M	575		160	$74.96	18	36	
27DC-7	27DC-H	500		180	$81.81	18	36	
31DC-6	31DC-H	600		205	$102.20	18	36	

BCI Group Size	ENERGYWISE Type	20 Hour Rate AH	Reserve Capacity 75 amps	Retail	Free Replacement	WARRANTY Months	Cost/Mo
US 12 Volt Golf Battery							
GC12	US12V XC	155	77	$177.65	18	18	
US 12 Volt Scrubber Series							
J185	US 185E XC	185	93	$167.81	18	18	
J185	US 185 XC	200	106	$181.89	18	18	
J185	US 185HC XC	220	117	$200.09	18	18	
US 6 Volt Scrubber Series							
J305	US-305E XC	290	182	$163.00	18	18	
J305	US-305 XC	310	185	$197.40	18	18	
J305	US-305 HC XC	340	215	$217.15	18	18	
FS-L16E	US-L16E XC	360	270	$190.26	18	18	
FS-L16HC	US-L16HC XC	420	322	$244.55	18	18	
RE L16	RE L16 XC	428	254	$288.24	24	7 yr.	
US 12 Volt Deep Cycle Series							
24/12V	24 DC95	95	34	$91.64	18	18	
27	27DC XC	105	42	$128.24	18	18	
31DC	31DC XC	130	49	$164.71	18	18	
US BATTERY 6 VOLT GOLF							
GC2	US-2000 XC	216	114	$108.91	18	18	
GC2	US-2200 XC	232	122	$122.20	18	18	
GC2	US-125 XC	242	140	$142.90	18	18	
US BATTERY 8 VOLT GOLF							
GC8	US 8VGC XC	170	90	$123.22	18	18	

Price List Effective Jan, 1 2012
All prices quoted are NO EXCHANGE

INDUSTRIAL STEEL CASE BATTERIES					
Item Number	Voltage	Rated A/H 20 Hrs.	Usable A/H 20 Hrs.	RETAIL	Year Warranty
EW-1285-13	12	637	510	$ 1,356.25	5
EW-1285-15	12	743	595	$ 1,506.25	5
EW-1285-17	12	850	680	$ 1,668.75	5
EW-1285-21	12	1062	850	$ 1,993.75	5
EW-1285-27	12	1381	1105	$ 2,462.00	5
EW-1285-33	12	1700	1360	$ 2,937.50	5
EW-2485-13	24	637	510	$ 2,712.50	5
EW-2485-15	24	743	595	$ 3,012.50	5
EW-2485-17	24	850	680	$ 3,337.50	5
EW-2485-21	24	1062	850	$ 3,987.50	5
EW-2485-27	24	1381	1105	$ 4,925.00	5
EW-2485-33	24	1700	1360	$ 5,937.50	5
EW-4885-13	48	637	510	$ 5,418.75	5
EW-4885-15	48	743	595	$ 5,670.59	5
EW-4885-17	48	850	680	$ 6,282.35	5
EW-4885-21	48	1062	850	$ 7,975.00	5
EW-4885-27	48	1381	1105	$ 9,850.00	5
EW-4885-31	48	1700	1360	$ 11,875.00	5

These batteries come with a 5 year warranty rated at 80% discharge. 1800 cyles
These batteries have 2 volt cells that are bolted together, so changing a cell is easy.

Lithium Batteries

These Lithium batteries can be completely discharged without causing any damage to the battery, there is absolutely no sulfation or maintenance with this technology. They have a five year warranty rated at 1300 cyles at 100% discharge. The recharge time is approximately 1/3 the time than flooded batteries.

Model #	**Description**	**Dealer**
12V7A EV	12 Volt 7 A.H.	$140.92
125V19A EV	12 Volt 19 A.H.	$307.31
12V60AEG-30H	12 Volt 60 A.H.	$786.91

Custom sizes available. Call Wellspring R.E. Power @ 260-768-7336

ENERGYWISE

1085N 850W Shipshewana, IN 46565
(260) 768-7336

Sealed Lead Acid

Industrial

6 Volt Scrubber

6 Volt Golf

Deep Cycle

EV80A-A AGM Battery

Ultralast Rechargeable

4 Position

Solar 8 Slot

Industrial Alkaline E529 2009 1209